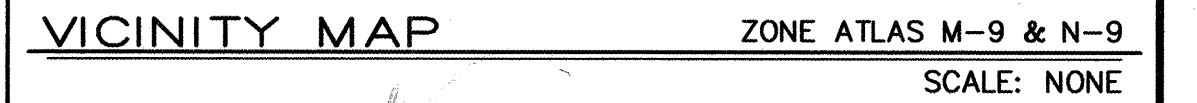


SCANNED BY
MESA REPRO



NOTICE TO CONTRACTORS

- ALL SANITARY IS
PVC SPRINGS ON SITE
ALL WATERLINE PVC 4900
John T. [Signature]

APPROVED AS RECORD DRAWINGS
DESIGN REVIEW SECTION
CITY CONSTRUCTION ENGINEER
DATE: 11/17/03

1001918

09-12-03 Date

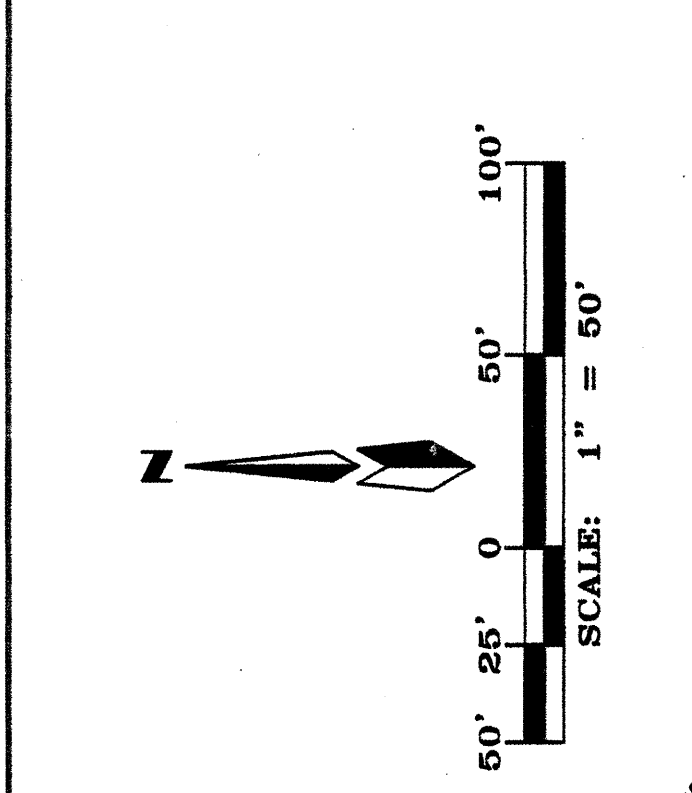
REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE
ENGINEERS STAMP & SIGNATURE		APPROVALS	ENGINEER	DATE	*****		
 11-4-02		DRC CHAIRMAN	<i>Robert J. Agnew</i>	11-27-02	APPROVED FOR CONSTRUCTION		
		TRANSPORTATION	<i>Mike S. White</i>	11-8-02	11-8-02		
		WATER/WASTEWATER	<i>James J. Brown</i>	10/29/02	10/29/02		
		HYDROLOGY	<i>Brian D. B. B. B.</i>	10/29/02	10/29/02		
		CIP			<i>Robert J. Agnew</i>		
		CONSTR. MNGMT.			ENGINEER		
		CONSTR. COORD.	<i>John L. L.</i>	11-27-02	DATE		
CITY PROJECT NO.		645689		SHEET		OF	
				1		22	

PRELIMINARY
PLAT FOR
**EL RANCHO GRANDE I
UNIT 5A AND 5B
SUBDIVISION**
WITHIN THE
TOWN OF ATRISCO GRANT
PROJECTED SECTION 4 TOWNSHIP 9 NORTH, RANGE 2 EAST, NMPM
PROJECTED SECTION 33 TOWNSHIP 10, NORTH, RANGE 2 EAST, NMPM
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
APRIL, 2002

SCANNED BY
JESAS REPRO

ALL STREETS SHOWN
HEREON ARE HEREBY
DEDICATED AS PUBLIC
RIGHT-OF-WAY

ABBREVIATIONS
10' PUE = PUBLIC UTILITY EASEMENTS
ROW = RIGHT-OF-WAY



SEE SHEET 3 OF 8



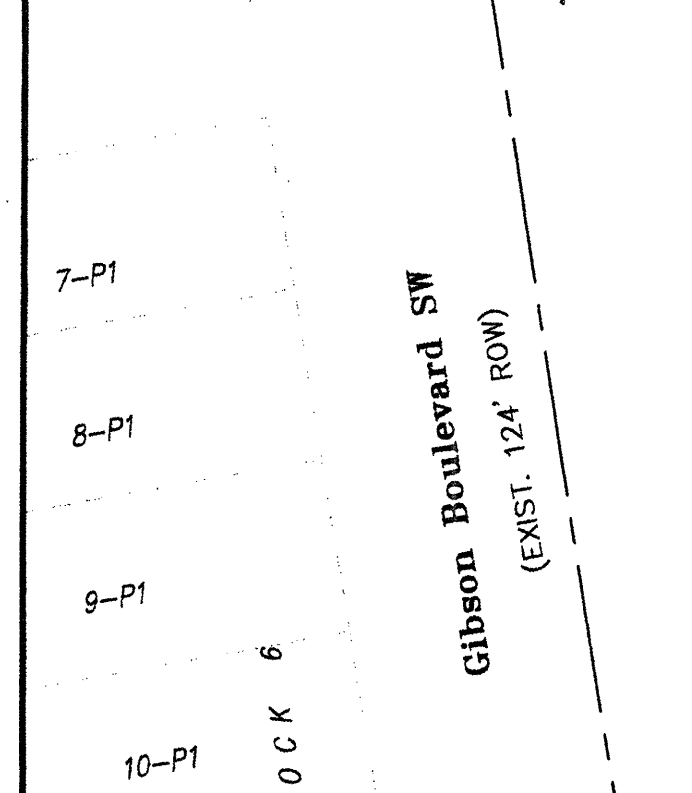
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Date: 05/24/02					

PRELIMINARY
PLAT FOR
**EL RANCHO GRANDE I
UNIT 5A AND 5B
SUBDIVISION**
WITHIN THE
TOWN OF ATRISCO GRANT
PROJECTED SECTION 4 TOWNSHIP 9 NORTH, RANGE 2 EAST, NMPM
PROJECTED SECTION 33 TOWNSHIP 10, NORTH, RANGE 2 EAST, NMPM
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
MAY, 2002

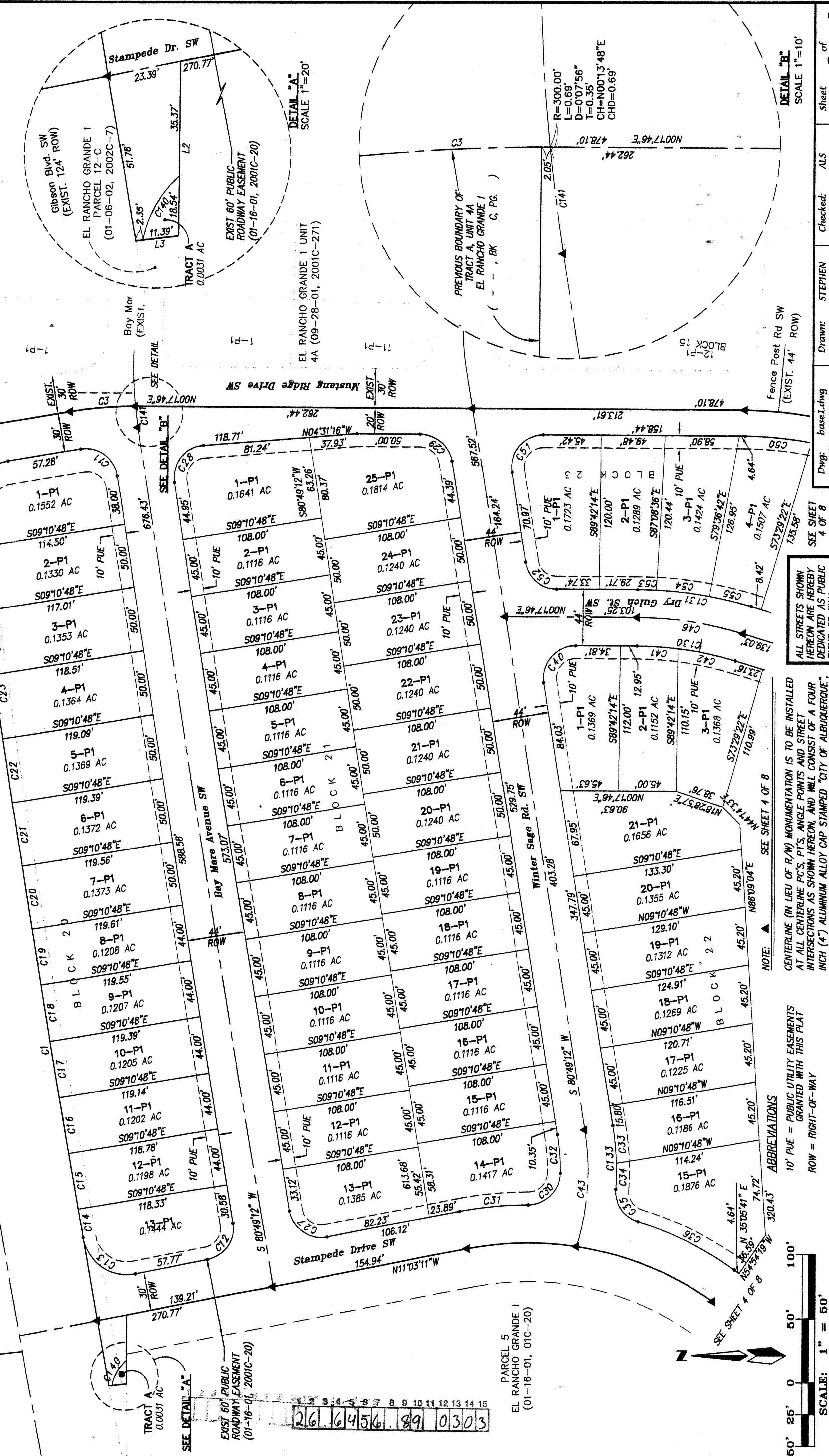
SCANNED BY
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SEE SHEET 3 OF 8



Dwg: base.l.dwg	Scale: 1" = 50'	Drawn: STEPHEN	Checked: ALS	Job: A02030	Sheet of 3 8
Date: 05/24/02					

PRELIMINARY
PLAT FOR
EL RANCHO GRANDE I
UNIT 5A AND 5B
SUBDIVISION
WITHIN THE
TOWN OF ATRISCO GRANT
PROJECTED SECTION 4 TOWNSHIP 9 NORTH, RANGE 2 EAST, NMPM
PROJECTED SECTION 33 TOWNSHIP 10, NORTH, RANGE 2 EAST, NMPM
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
APRIL, 2002

SCANNED BY:
MESA REPRO



ABBREVIATIONS

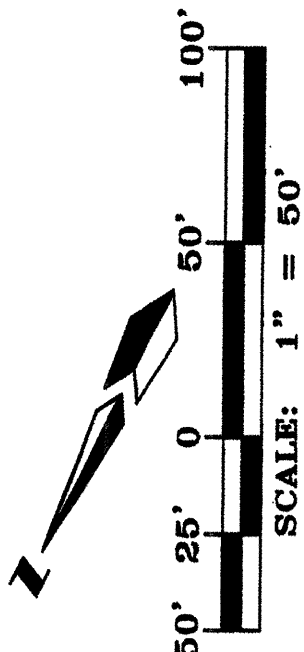
10' PUE = PUBLIC UTILITY EASEMENTS
GRANTED WITH THIS PLAT
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ALL STREETS SHOWN
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NOTE: ▲
CENTERLINE (IN LIEU OF R/W) MONUMENTATION IS TO BE INSTALLED
AT ALL CENTERLINE P.C.'S, P.T.'S, ANGLE POINTS AND STREET
INTERSECTIONS AS SHOWN HEREON, AND WILL CONSIST OF A FOUR
INCH (4") ALUMINUM ALLOY CAP STAMPED "CITY OF ALBUQUERQUE",
"CENTERLINE MONUMENT", "DO NOT DISTURB", "PLS # 7719".

Dwg:	base1.dwg	Drawn:	STEPHEN	Checked:	ALS	Sheet	6	of	8
Scale:	1" = 50'	Date:	05/24/02	Job:	A02030				

PRELIMINARY
PLAT FOR
EL RANCHO GRANDE I
UNIT 5A AND 5B
SUBDIVISION
WITHIN THE
TOWN OF ATRISCO GRANT
PROJECTED SECTION 4 TOWNSHIP 9 NORTH, RANGE 2 EAST, NMPM
PROJECTED SECTION 33 TOWNSHIP 10, NORTH, RANGE 2 EAST, NMPM
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
APRIL, 2002

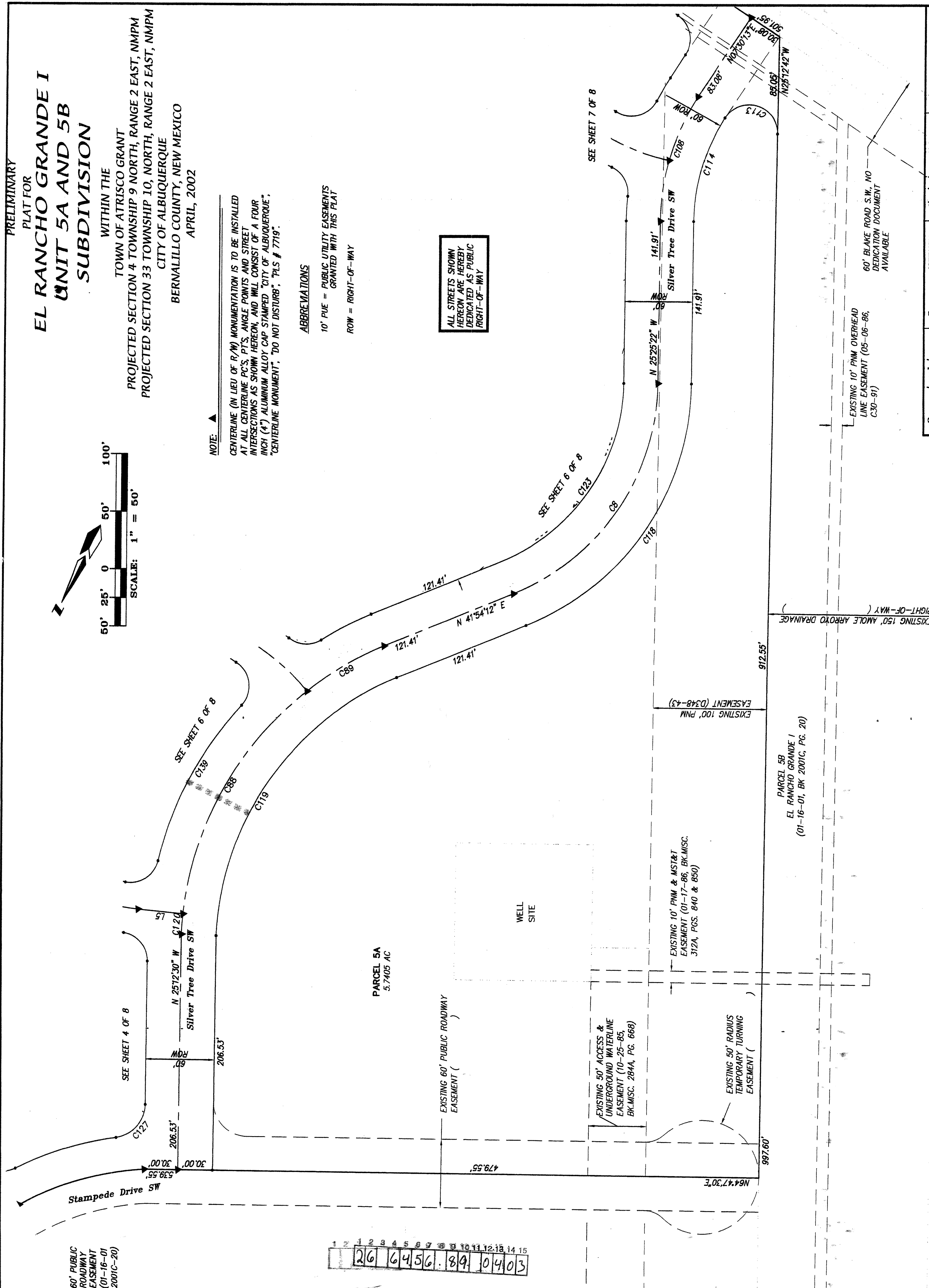


NOTE: ▲
CENTERLINE (IN LIEU OF R/W) MONUMENTATION IS TO BE INSTALLED
AT ALL CENTERLINE P.C.'S, P.T.'S, ANGLE POINTS AND STREET
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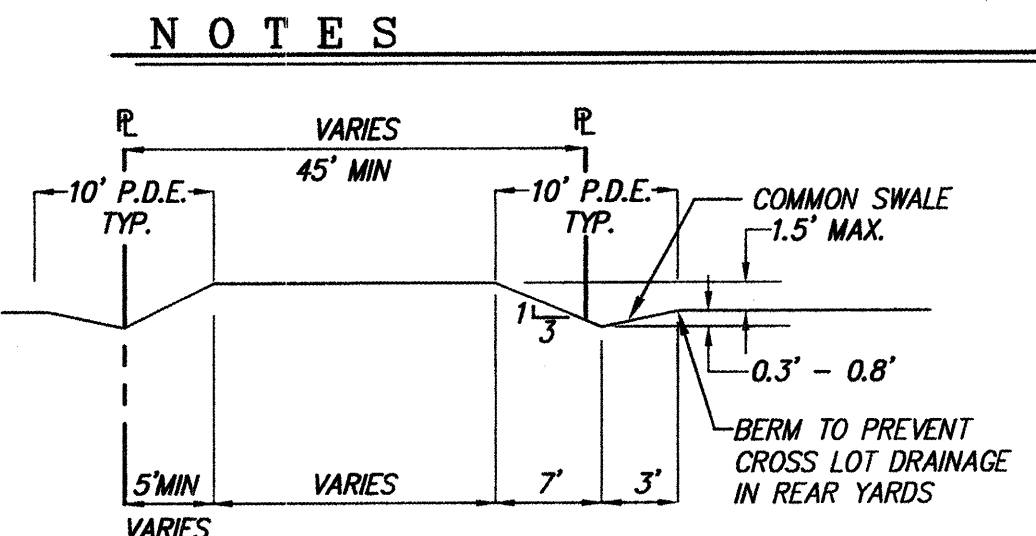
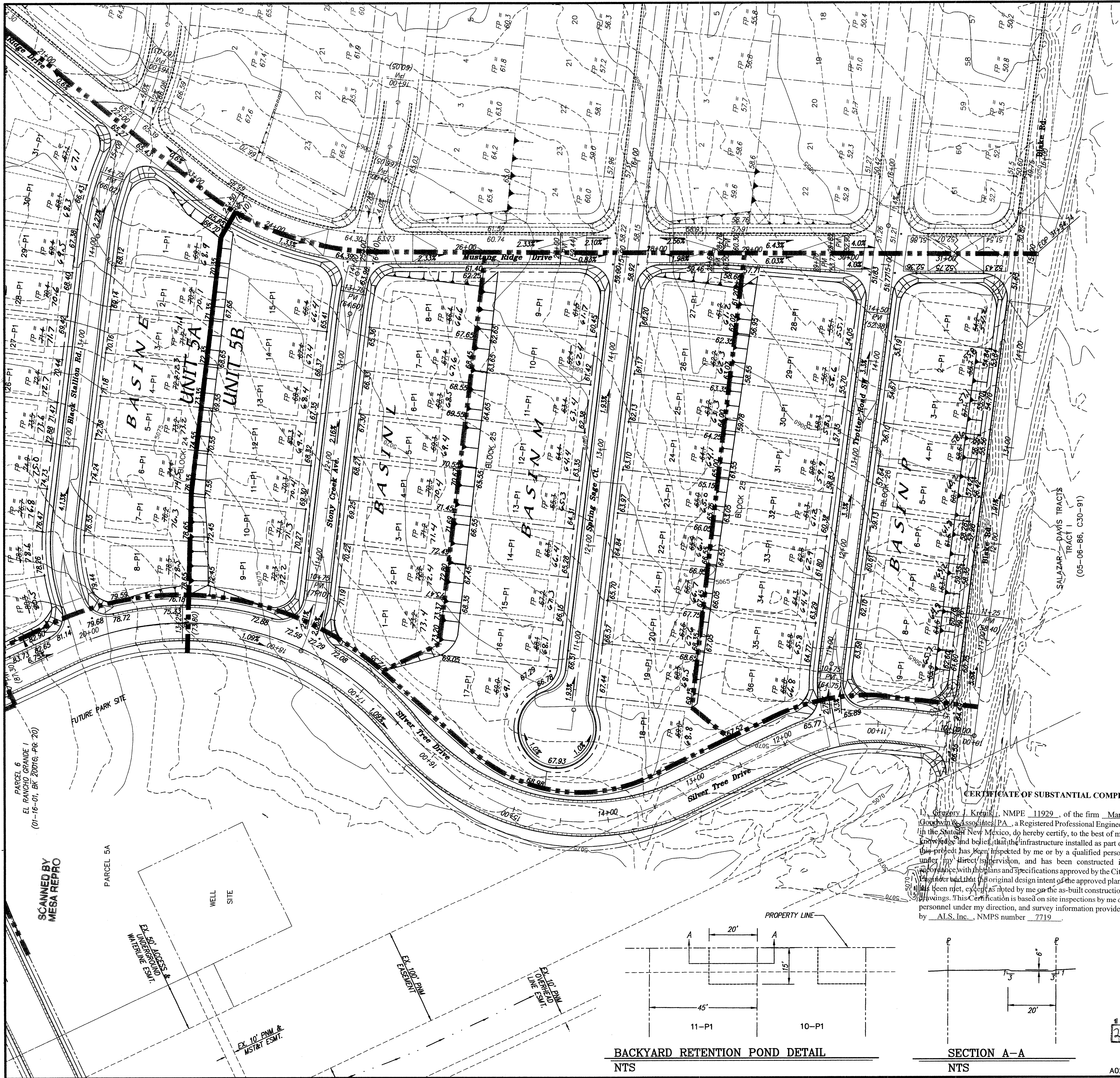
645689

SHEET 4 OF 22

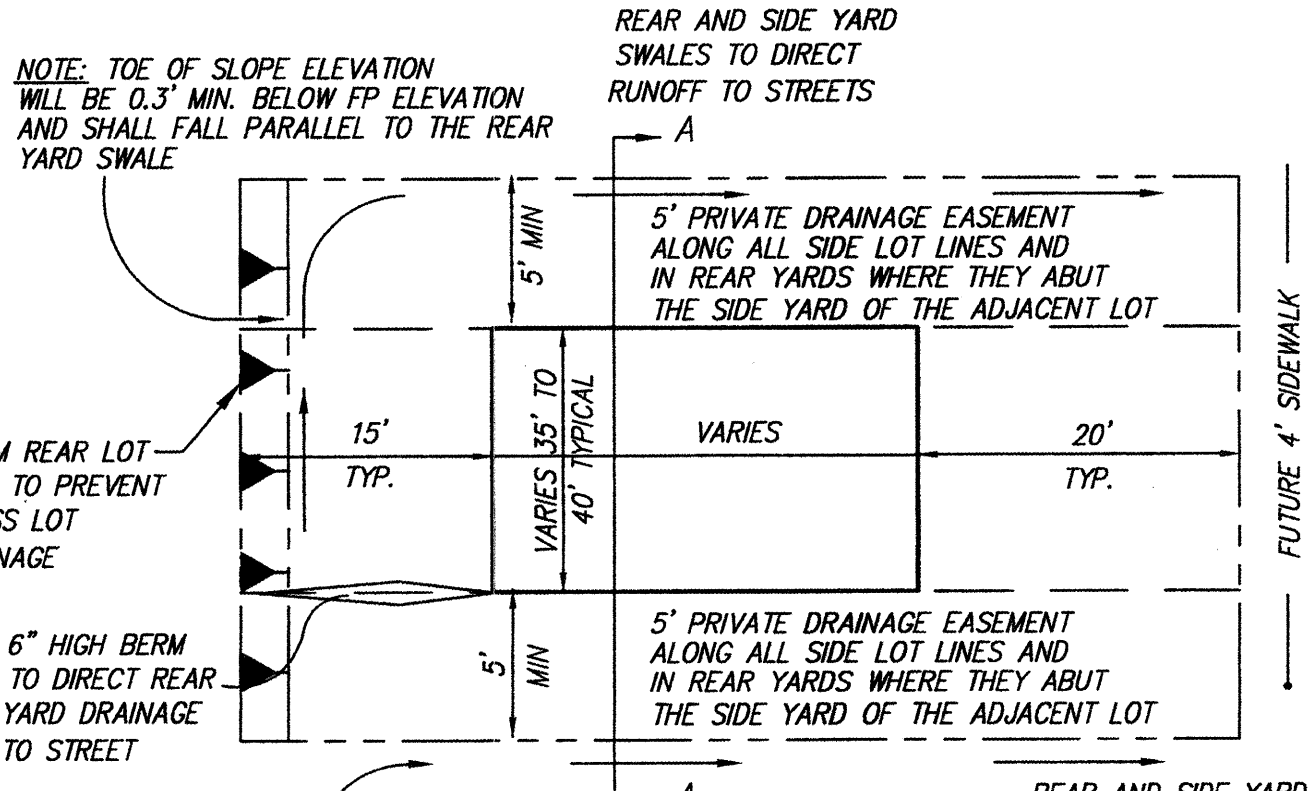
SCANNED BY
MESA REPRO

CURVE TABLE				CURVE TABLE			
CURVE	RADIUS	LENGTH	DELTA	TANGENT	CH-BEARING	CHORD	
C75	25.00	48.92	112.0679°	37.14	N71°13'36"W	41.48	
C76	320.00	42.54	372°10"	21.30	S53°01'09"W	42.51	
C77	158.00	9.29	372°10"	4.65	N64°58'02"W	9.29	
C78	158.00	50.78	182°45°	25.61	S64°08'28"W	50.56	
C79	25.00	37.92	86°54'20"	23.68	S31°28'53"W	34.39	
C80	315.00	73.80	132°52'24"	37.07	N05°15'35"W	73.63	
C81	315.00	61.59	145°02'24"	41.03	N05°15'35"W	61.36	
C82	25.00	43.45	99°34'36"	29.57	S32°52'21"E	38.18	
C83	322.00	20.10	334°36"	10.05	N81°29'42"E	20.10	
C84	24.03	37.90	87°06'54"	23.70	N65°34'20"E	34.30	
C85	320.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C86	300.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C87	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C88	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C89	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C90	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C91	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C92	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C93	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C94	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C95	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C96	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C97	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C98	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C99	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C100	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C101	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C102	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C103	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C104	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C105	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C106	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C107	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C108	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C109	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C110	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C111	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C112	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C113	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C114	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C115	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C116	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C117	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C118	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C119	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C120	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C121	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C122	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C123	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C124	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C125	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C126	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C127	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C128	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C129	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C130	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C131	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C132	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C133	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C134	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C135	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C136	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C137	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C138	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C139	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C140	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	
C141	280.00	109.54	182°13'37"	51.22	S22°01'51"W	102.11	

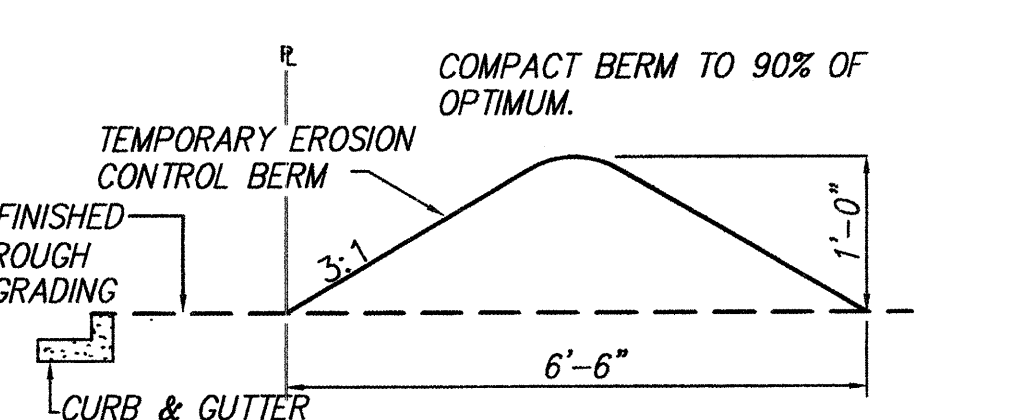
CURVE TABLE						
CURVE	RADIUS	LENGTH	DELTA	TANGENT	CH-BEARING	CHORD
C1	1954.00	530.77	131°27'	265.40	S80°31'50"W	530.76
C2	2900.00	222.41	505°50'	111.28	S83°50'28"W	222.34
C3	300.00	51.81	9°53'40"	24.97	N64°39'04"W	51.74
C4	300.00	201.75	36°31'53"	104.86	N19°33'42"E	197.97
C5	300.00	201.75	36°31'53"	104.86	S19°33'42"E	197.97
C6	250.00	114.70	26°17'17"	58.38	N48°00'23"E	113.70
C7	250.00	201.36	46°08'53"	106.50	N48°00'23"E	195.96
C8	200.00	233.48	67°19'30"	133.19	S08°14'25"W	195.96
C9	505.00	233.48	26°29'23"	117.44	S08°14'25"W	195.96
C10	30.00	44.68	82°20'12"	27.65	N52°16'10"W	40.67
C11	25.00	39.45	80°25'06"	25.18	N35°56'39"E	35.48
C12	25.00	38.45	80°25'06"	25.18	N35°56'39"E	35.48
C13	35.00	55.69	81°09'33"	35.72	S34°13'35"W	50.00
C14	1954.00	22.91	0°03'57"	11.45	S08°08'20"W	22.91
C15	1954.00	44.00	0°07'35"	22.00	S08°14'05"W	44.00
C16	1954.00	44.00	0°07'35"	22.00	S08°14'05"W	44.00
C17	1954.00	44.00	0°07'35"	22.00	S08°14'05"W	44.00
C18	1954.00	44.00	0°07'35"	22.00	S08°14'05"W	44.00
C19	1954.00	44.00	0°07'35"	22.00	S08°14'05"W	44.00
C20	1954.00	44.00	0°07'35"	22.00	S08°14'05"W	44.00
C21	1954.00	44.00	0°07'35"	22.00	S08°14'05"W	44.00
C22	1954.00	44.00	0°07'35"	22.00	S08°14'05"W	44.00
C23	1954.00	29.63	0°40'44"	14.81	S01°37'56"W	29.63
C24	2500.00	50.06	1°08'51"	25.03	S04°31'30"W	50.06
C25	2500.00	34.88	0°47'58"	17.44	S04°31'30"W	34.88
C26	2500.00	40.09	91°52'23"	25.83	S34°51'00"W	35.93
C27	25.00	41.30	94°39'44"	27.12	N01°50'27"W	36.76
C28	25.00	35.14	80°31'26"	21.17	N03°31'59"E	32.31
C29	25.00	35.14	80°31'26"	21.17	N03°31'59"E	32.31
C30	280.00	53.30	10°53'08"	26.69	N05°16'37"W	53.12
C31	178.00	30.16	9°42'24"	15.11	N05°16'37"W	30.12
C32	222.00	29.28	9°42'24"	14.66	N05°16'37"W	28.26
C33	222.00	29.28	9°42'24"	14.66	N05°16'37"W	28.26
C34	222.00	29.28	9°42'24"	14.66	N05°16'37"W	28.26
C35	25.00	33.16	75°29'33"	19.53	S55°40'20"W	30.78
C36	250.00	65.12	17°25'08"	42.89	N26°33'07"E	64.80
C37	158.00	65.12	17°25'08"	42.89	N26°33'07"E	64.80
C38	25.00	48.01	10°14'53"	24.42	S02°01'46"E	48.01
C39	25.00	48.01	10°14'53"	24.42	S02°01'46"E	48.01
C40	25.00	48.01	10°14'53"	24.42	S02°01'46"E	48.01
C41	278.00	32.12	6°37'13"	16.08	N03°36'22"E	32.10
C42	278.00	32.12	6°37'13"	16.08	N03°36'22"E	32.10
C43	200.00	92.13	26°23'39"	46.90	S05°59'03"E	91.31
C44	180.00	98.12	31°14'02"	50.31	N01°21'08"W	97.63
C45	75.00	104.99	80°12'52"	63.16	N05°36'50"E	96.63
C46	300.00	84.90	16°12'52"	42.74	N08°24'12"E	84.62
C47	280.00	34.52	7°03'50"	17.28	N35°17'44"E	34.39
C48	280.00	50.85	10°24'18"	25.49	N08°13'39"E	50.78
C49	280.00	50.85	10°24'18"	25.49	N08°13'39"E	50.78
C50	280.00	50.85	10°24'18"	25.49	N08°13'39"E	50.78
C51	25.00	43.00	89°28'54"	28.50	N48°28'51"W	32.31
C52	25.00	43.00	89°28'54"	28.50	N48°28'51"W	32.31
C53	322.00	14.39	2°33'38"	7.20	N07°34'35"E	14.39
C54	322.00	14.39	2°33'38"	7.20	N07°34'35"E	14.39
C55	322.00	42.33	31°14'02"	21.19	N06°31'27"E	42.30
C56	25.00	17.33	22°04'15"	8.78	N01°21'08"W	17.23
C57	45.00	65.48	83°22'04"	40.07	N01°21'08"W	58.65
C58	45.00	65.48	83°22'04"	40.07	N01°21'08"W	58.65
C59	45.00	65.48	83°22'04"	40.07	N01°21'08"W	58.65
C60	202.00	39.76	11°16'39"	19.94	S77°58'38"E	39.70
C61	202.00	39.76	11°16'39"	19.94	S77°58'38"E	39.70
C62	25.00	33.17	75°29'33"	19.53	S55°40'20"E	30.78
C63	280.00	92.07	18°50'26"	46.46	N46°51'39"E	91.66
C64	30.00	35.61	68°01'00"	20.24	S27°16'22"W	33.56
C65	25.00	32.53	74°32'40"	17.63	N70°01'30"W	32.28
C66	297.00	35.22	6°47'28"	17.63	N70°01'30"W	32.28
C67	297.00	35.22	6°47'28"	17.63	N70°01'30"W	32.28
C68	297.00	35.22	6°47'28"	17.63	N70°01'30"W	32.28
C69	30.00	7.05	13°28'22"	3.54	S12°28'19"E	7.04
C70	202.00	21.87	81°48'34"	13.86	S06°08'47"E	21.87
C71	202.00	21.87	81°48'34"	13.86	S06°08'47"E	21.87
C72	202.00	21.87	81°48'34"	13.86	S06°08'47"E	21.87
C73	202.00	21.87	81°48'34"	13.86	S06°08'47"E	21.87
C74	253.00	44.17	100°07'00"	22.14	N78°51'59"W	44.11



SECTION A-A
NTS

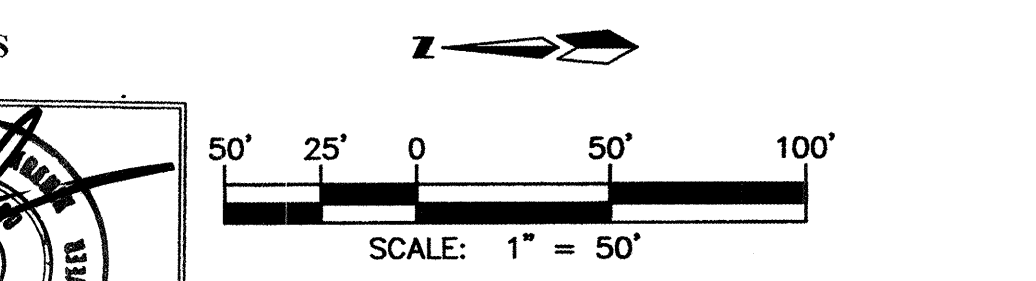


EROSION CONTROL BERM DETAIL
N.T.S.



EROSION CONTROL NOTES

1. CONTRACTOR MUST OBTAIN A TOPSOIL DISTURBANCE PERMIT FROM THE ENVIRONMENTAL HEALTH DIVISION PRIOR TO CONSTRUCTION.
2. CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION LATEST EDITION, SHALL GOVERN ALL WORK.
3. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE, AND FEDERAL DUST CONTROL MEASURES AND REQUIREMENTS, AND SHALL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL NECESSARY APPLICATIONS AND APPROVALS.
4. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE LOTS INTO PUBLIC RIGHT-OF-WAY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AS PER DETAIL, THIS SHEET AND BY WETTING THE SOIL TO KEEP IT FROM BLOWING. CONTRACTOR IS RESPONSIBLE FOR CLEANING UP ANY SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
5. THE EARTHWORK CONTRACTOR SHALL STOCKPILE ENOUGH MATERIAL ADJACENT TO RETAINING WALL LOCATIONS TO BE UTILIZED FOR WALL BACKFILL.
6. ALL STREET ELEVATIONS SHOWN ARE FINISHED FLOW LINE ELEVATIONS.



MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: **EL RANCHO GRANDE 1 - UNIT 5**
GRADING & DRAINAGE PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL
LAST DESIGN UPDATE	MO./DAY/YR.
	MO./DAY/YR.

CITY PROJECT NO. **6456849** ZONE MAP NO. **M9 & N9** SHEET **2** OF **2**

SHEET 7 OF 22

I, Gregory J. Kreml, NMPE 11929, of the firm Mark Goodwin & Associates, P.A., a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision, and has been constructed in accordance with the plans and specifications approved by the City Engineer and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings. This Certification is based on site inspections by me or personnel under my direction, and survey information provided by A.L.S., Inc., NMPS number 7719.



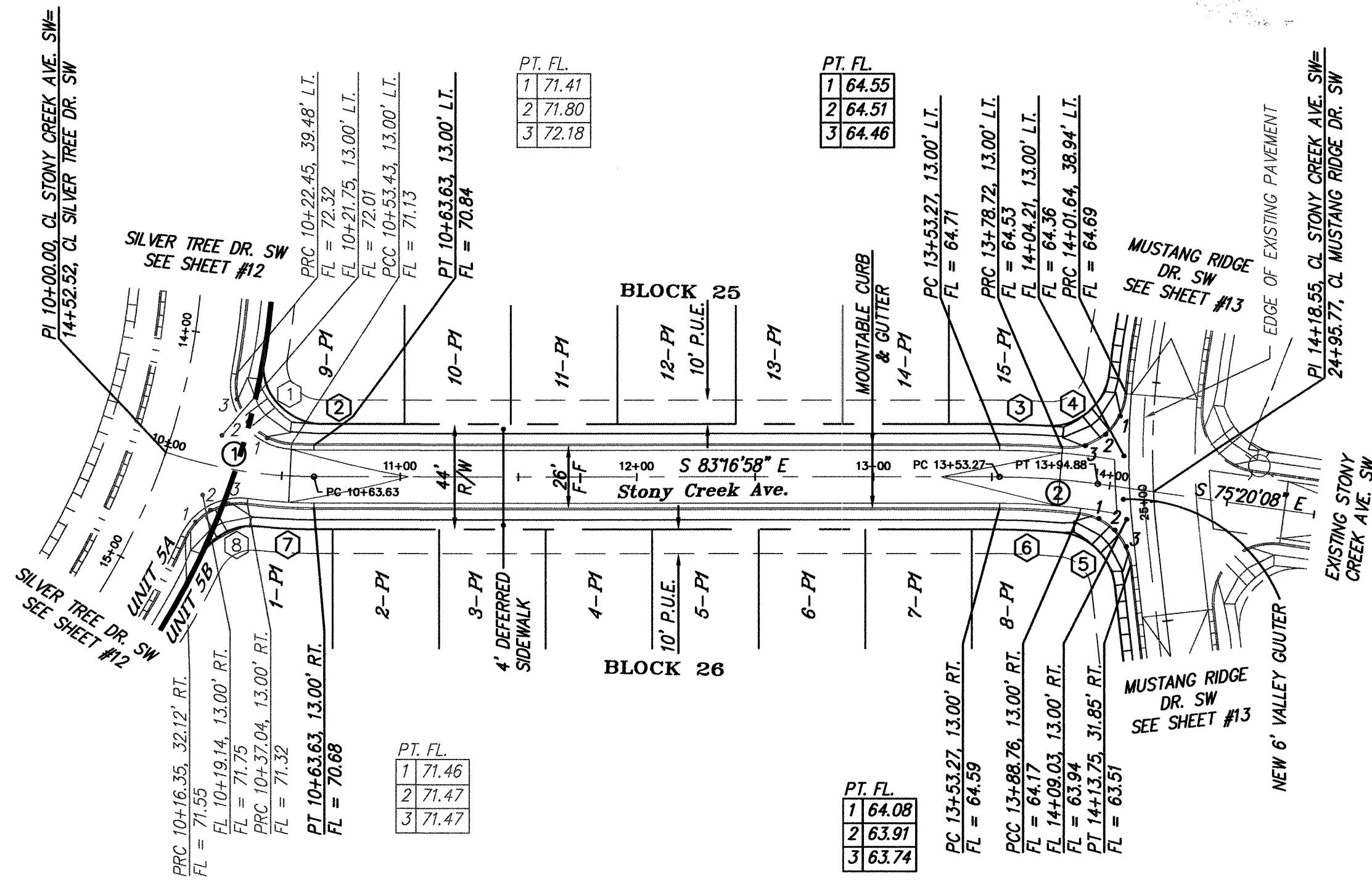
BACKYARD RETENTION POND DETAIL
NTS

SECTION A-A
NTS

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
26 64 56 89 07 03

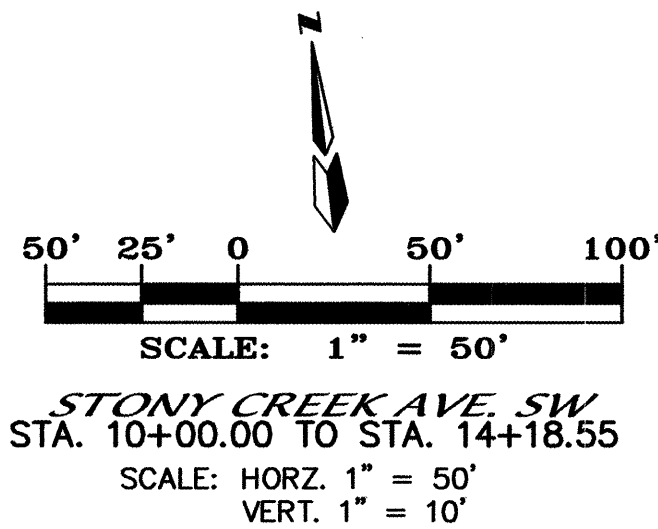
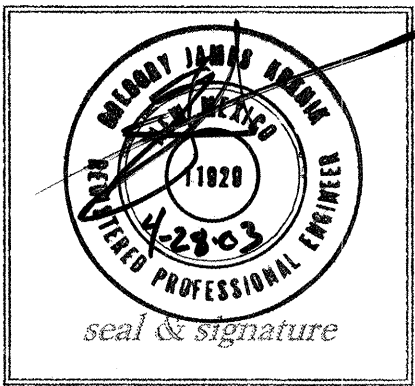
SCANNED BY
MESA REPRO

SCANNED BY
MESA REPHO



CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

I, Gregory J. Krenik, NMPE 11929, of the firm Mark Goodwin & Associates, P.A., a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision, and has been constructed in accordance with the plans and specifications approved by the City Engineer and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings. This Certification is based on site inspections by me or personnel under my direction, and survey information provided by A.L.S., Inc., NMPS number 7719.



NOTES

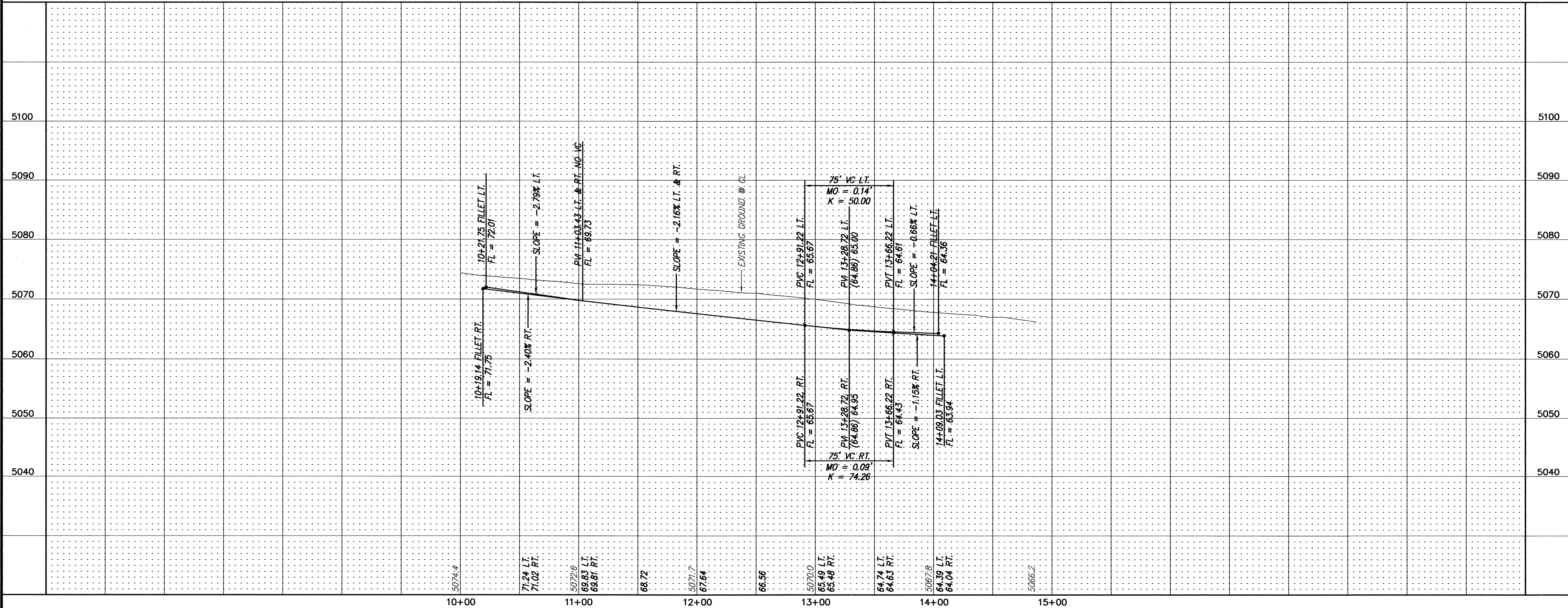
- ALL STATIONING IS CENTERLINE STATIONING.

CURVE DATA - DESCRIBES CENTERLINE

- | | |
|---|--|
| ① $\Delta = 1813'48''$
$R = 200.00'$
$T = 32.09'$
$L = 63.63'$ | ② $\Delta = 756'50''$
$R = 300.00'$
$T = 20.84'$
$L = 41.81'$ |
|---|--|

CURVE DATA - DESCRIBES FACE OF NEW CURB

- | | | |
|---|---|---|
| ① $\Delta = 97'48'46''$
$R = 25.00'$
$T = 28.66'$
$L = 42.68'$ | ② $\Delta = 2'55'20''$
$R = 187.00'$
$T = 4.77'$
$L = 9.54'$ | ③ $\Delta = 4'51'35''$
$R = 313.00'$
$T = 13.28'$
$L = 26.55'$ |
| ④ $\Delta = 90'11'13''$
$R = 25.00'$
$T = 25.08'$
$L = 39.35'$ | ⑤ $\Delta = 76'48'04''$
$R = 25.00'$
$T = 19.82'$
$L = 33.51'$ | ⑥ $\Delta = 6'46'39''$
$R = 287.00'$
$T = 16.99'$
$L = 33.95'$ |
| ⑦ $\Delta = 73'7'12''$
$R = 213.00'$
$T = 14.18'$
$L = 28.33'$ | ⑧ $\Delta = 73'26'51''$
$R = 25.00'$
$T = 18.65'$
$L = 32.05'$ | |

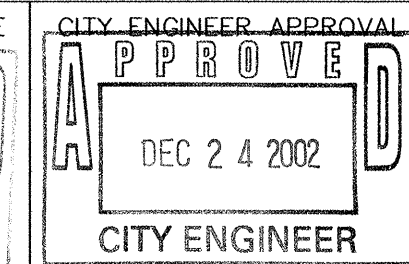
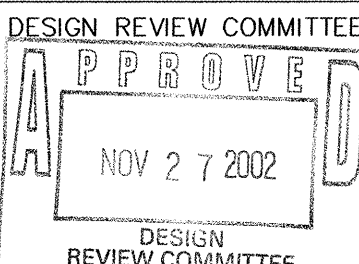


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
26 645689 0903

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CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539



TITLE: EL RANCHO GRANDE I - UNIT 5B
STONY CREEK AVE. SW
PAVING IMPROVEMENTS

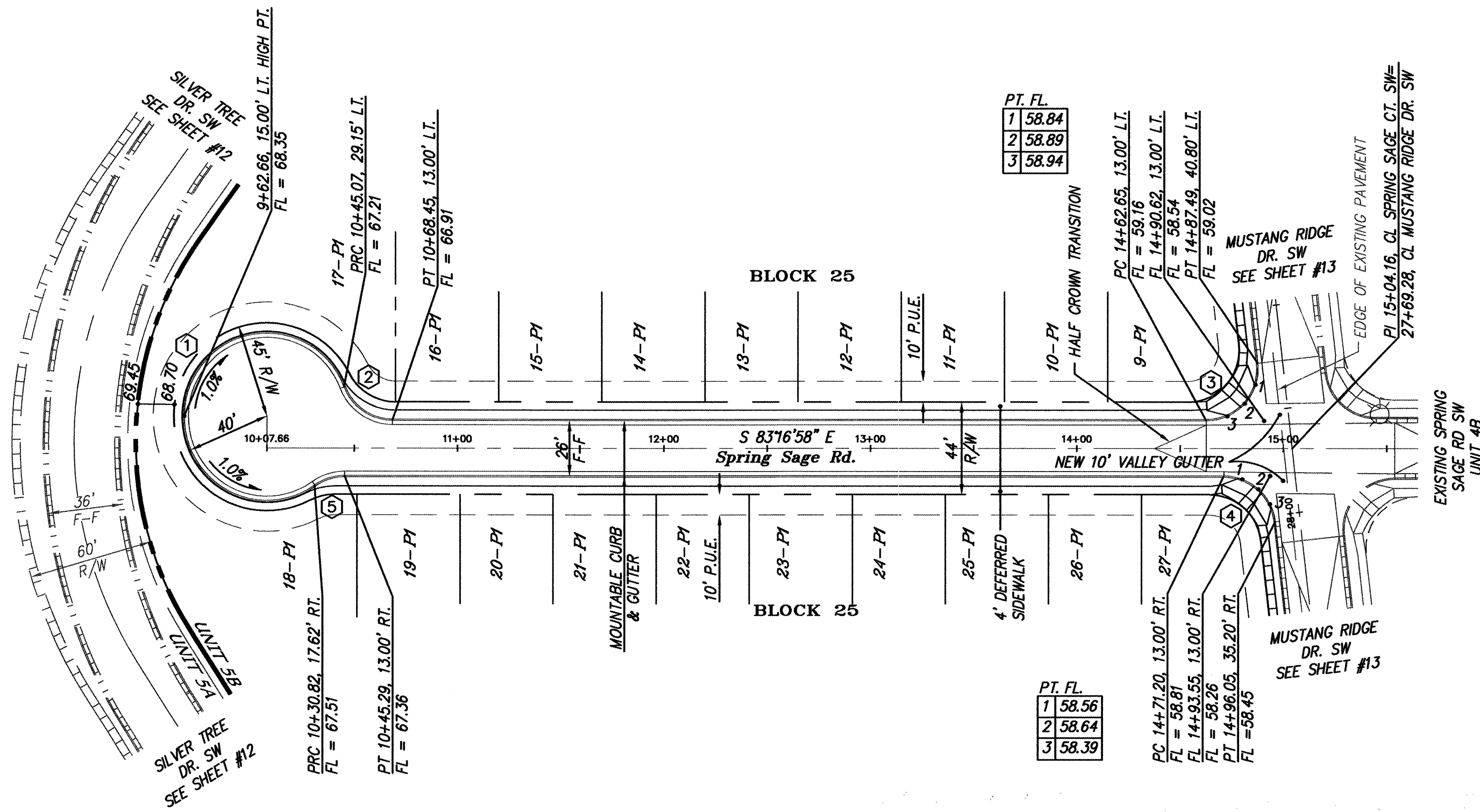


LAST DESIGN UPDATE

CITY PROJECT NO. 645689 ZONE MAP NO. M-9 & N-9 SHEET 9 OF 22

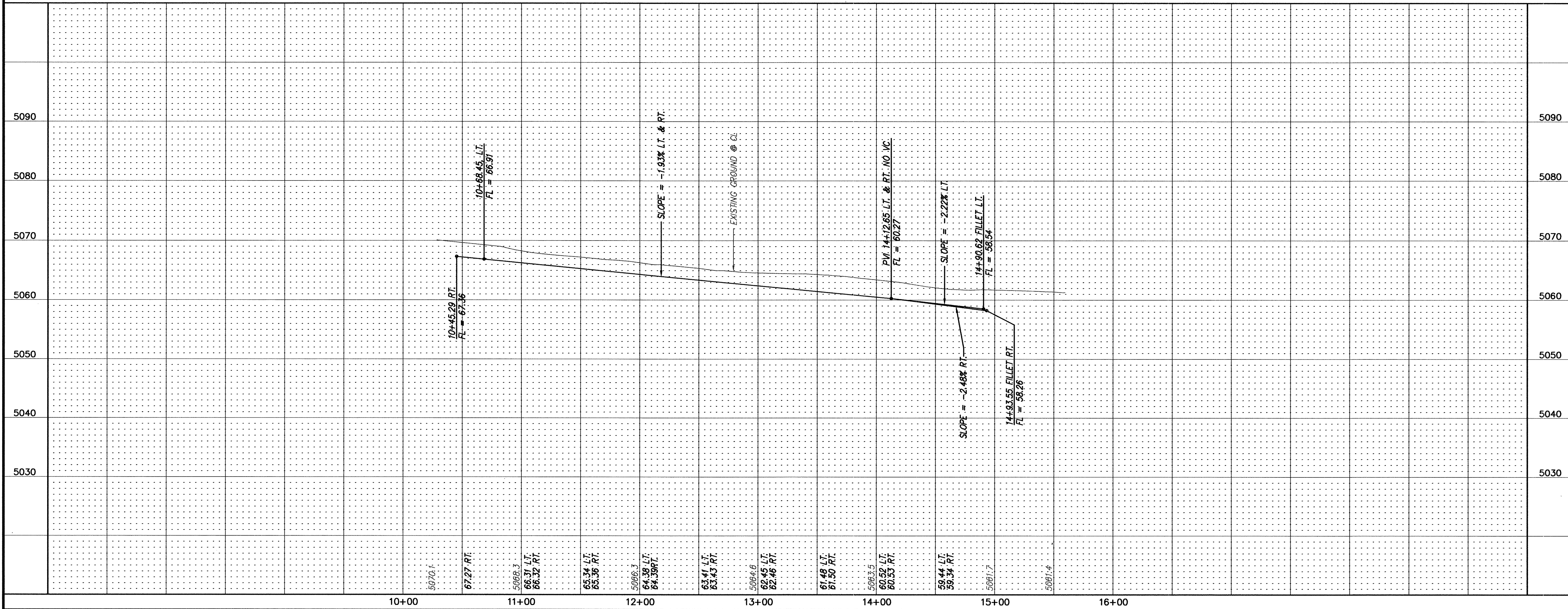
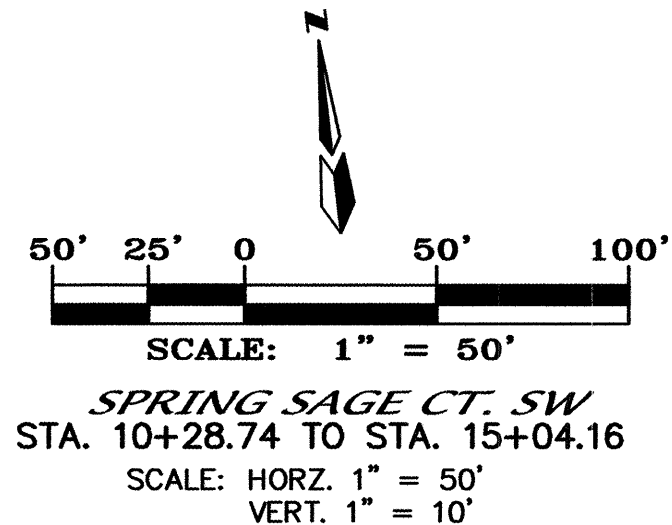
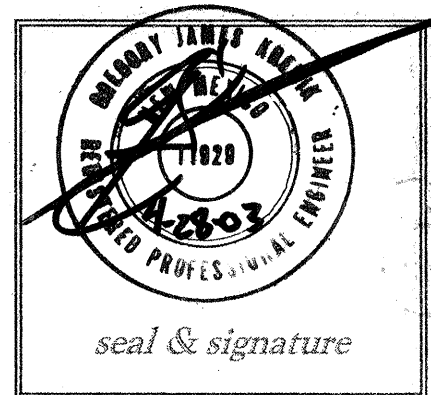
UNIT 5B SW ENTS			T	
MO./DAY/YR.		MO./DAY/YR.		
</				

SCANNED BY
MESA REPRO



CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

I, Gregory J. Krenik, NMPE 11929, of the firm Mark Goodwin & Associates, P.A., a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision, and has been constructed in accordance with the plans and specifications approved by the City Engineer and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings. This Certification is based on site inspections by me or personnel under my direction, and survey information provided by A.L.S., Inc., NMPS number 7719.



NOTES

1. ALL STATIONING IS CENTERLINE STATIONING.

CURVE DATA - DESCRIBES FACE OF NEW CURB

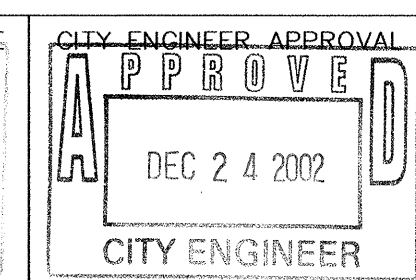
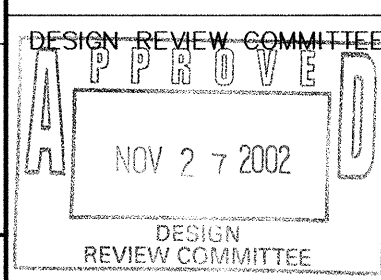
- ① $\Delta = 284^{\circ}39'05''$ $\Delta = 69^{\circ}16'40''$ $\Delta = 96^{\circ}25'16''$
 $R = 40.00'$ $R = 25.00'$ $R = 25.00'$
 $T = N/A$ $T = 17.27'$ $T = 27.97'$
 $L = 198.72'$ $L = 30.23'$ $L = 42.07'$
- ④ $\Delta = 83^{\circ}34'44''$ $\Delta = 35^{\circ}22'25''$
 $R = 25.00'$ $R = 25.00'$
 $T = 22.34'$ $T = 7.97'$
 $L = 36.47'$ $L = 15.43'$

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
26 6456.89 1003

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CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539



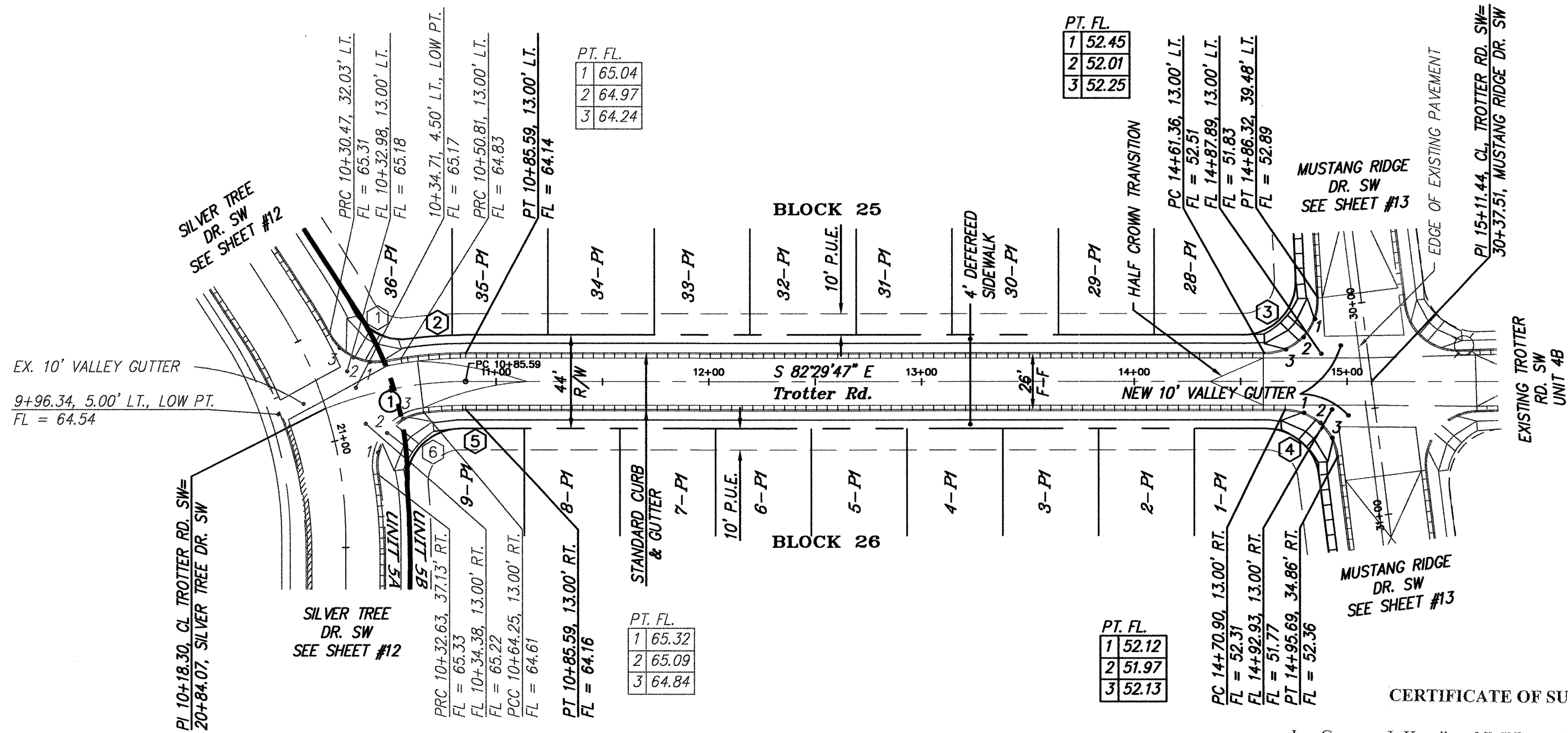
TITLE: EL RANCHO GRANDE I - UNIT 5B
SPRING SAGE CT. SW
PAVING IMPROVEMENTS



MO./DAY/YR.	MO./DAY/YR.

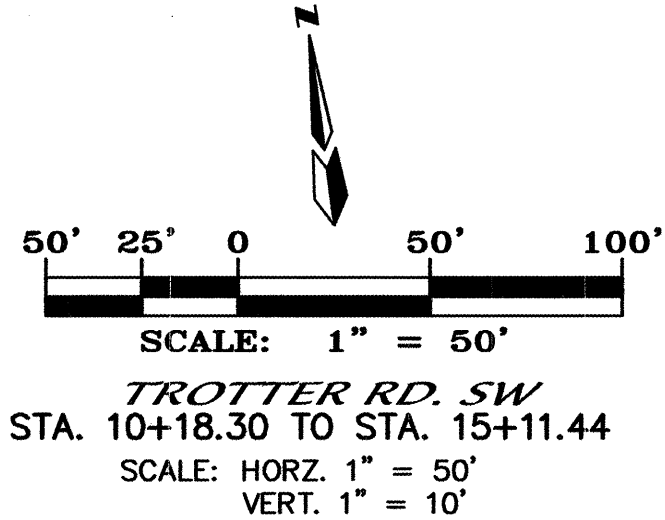
CITY PROJECT NO. 645689 ZONE MAP NO. M-9 & N-9 SHEET 10 OF 22

SCANNED BY
MESA REPRO



CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

I, Gregory J. Krenik, NMPE 11929, of the firm Mark Goodwin & Associates, P.A., a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision, and has been constructed in accordance with the plans and specifications approved by the City Engineer and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings. This Certification is based on site inspections by me or personnel under my direction, and survey information provided by ALS, Inc., NMPS number 7719.



NOTES

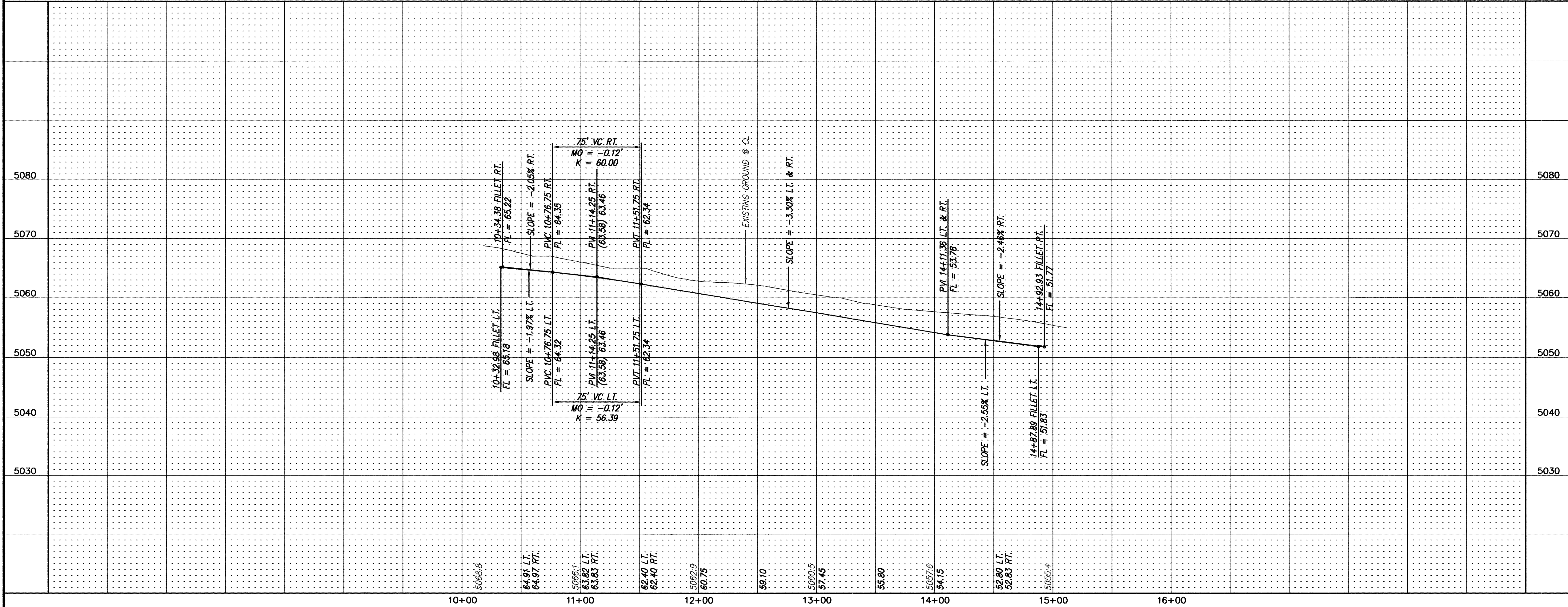
1. ALL STATIONING IS CENTERLINE STATIONING.

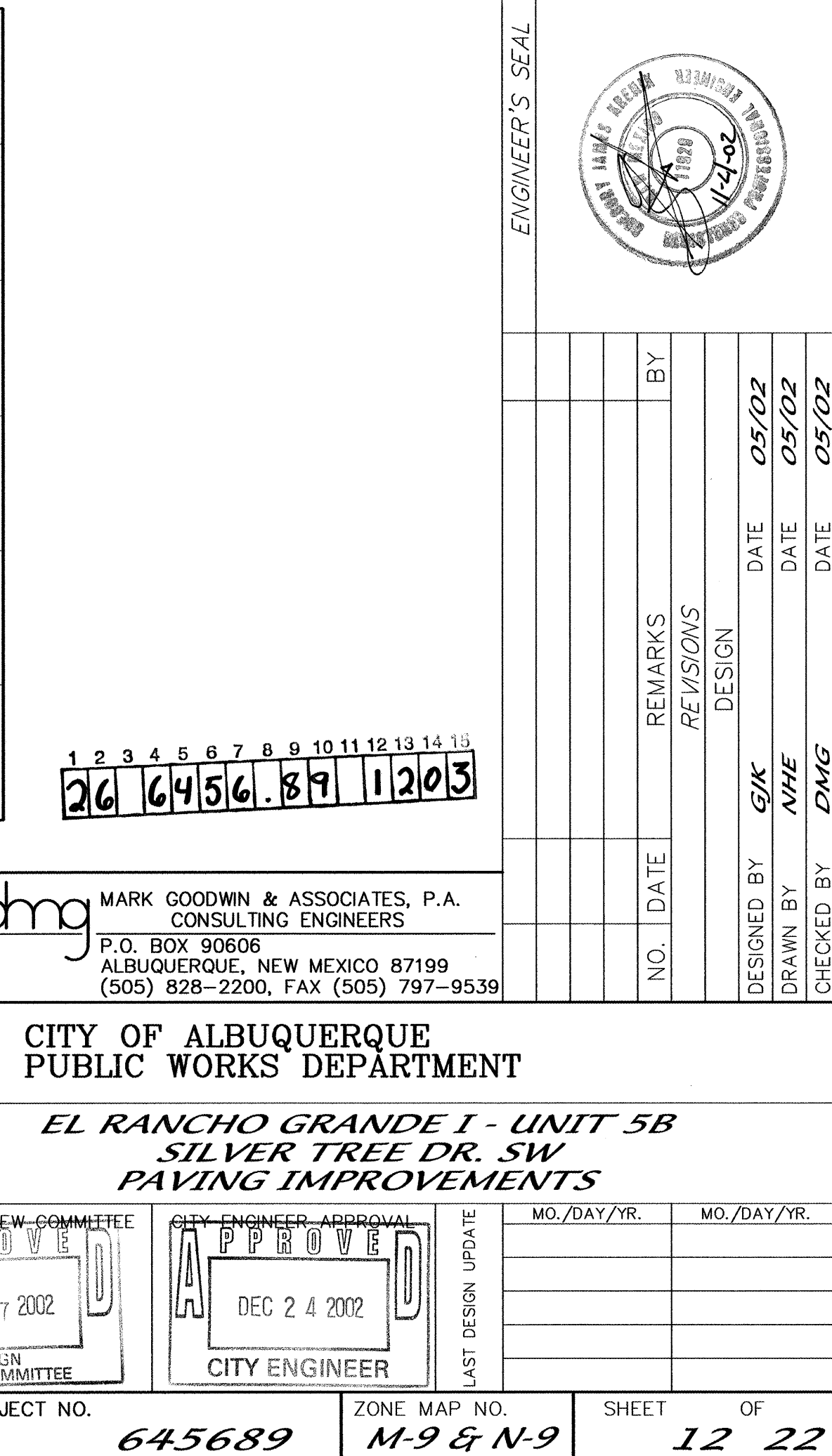
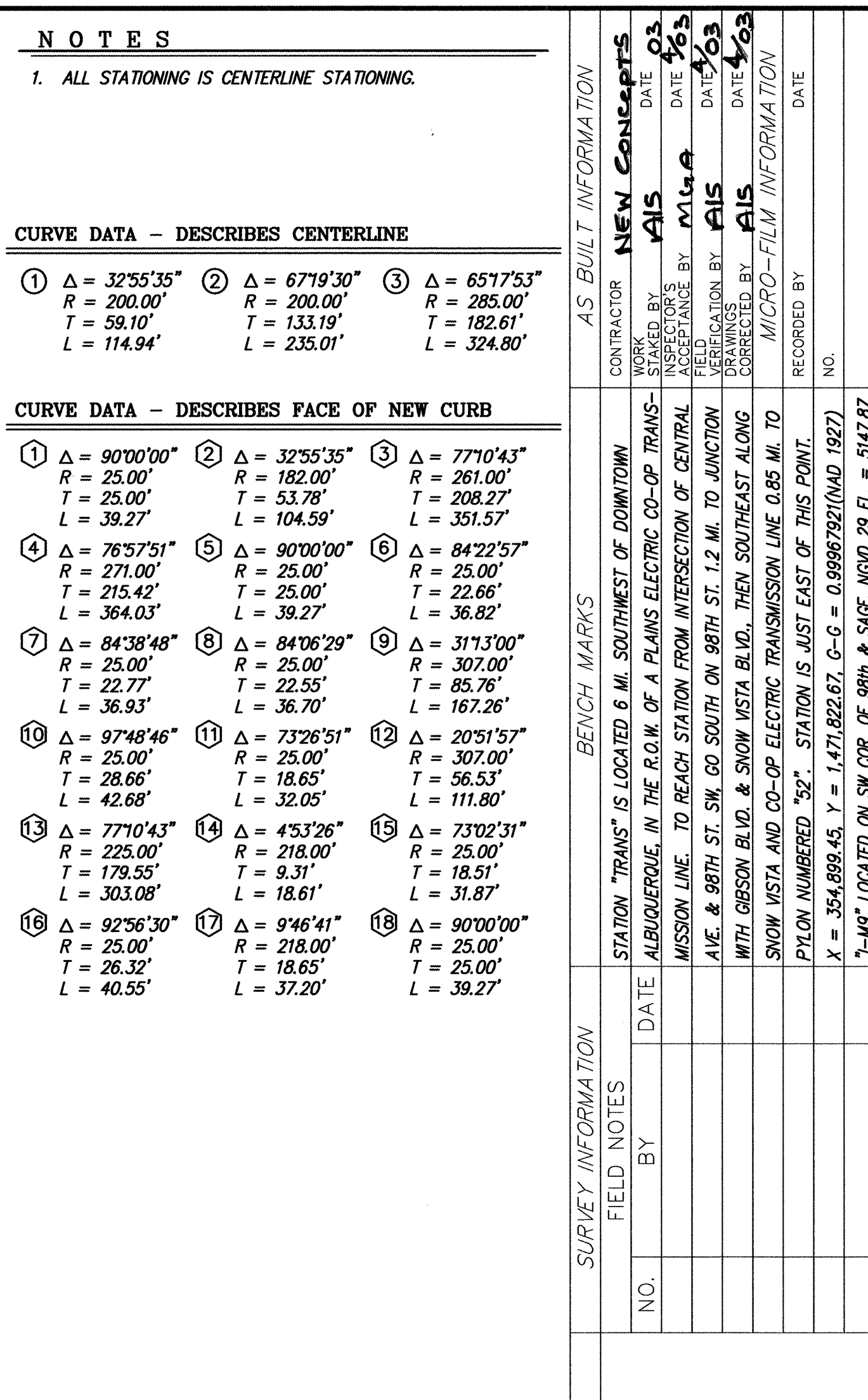
CURVE DATA - DESCRIBES CENTERLINE

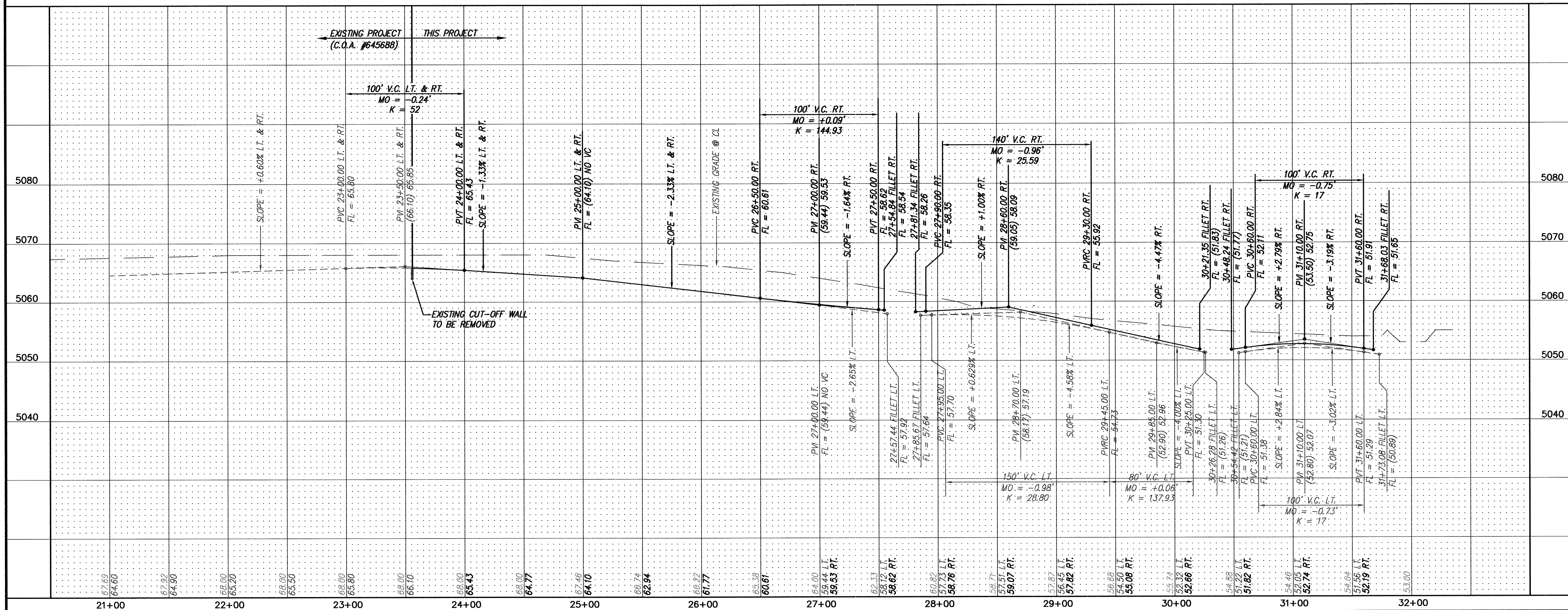
① Δ = 2125'14"
R = 180.00'
T = 34.04'
L = 67.29'

CURVE DATA - DESCRIBES FACE OF NEW CURB

① Δ = 72'58'37" R = 25.00' T = 18.49' L = 31.84'
② Δ = 11'04'19" R = 193.00' T = 18.71' L = 37.30'
③ Δ = 93'23'36" R = 25.00' T = 26.53' L = 40.75'
④ Δ = 82'47'33" R = 25.00' T = 22.04' L = 36.13'
⑤ Δ = 6'47'42" R = 167.00' T = 9.91' L = 19.81'
⑥ Δ = 93'02'16" R = 25.00' T = 26.36' L = 40.60'







I, Gregory J. Krenik, NMPE 11929, of the firm Mark Goodwin & Associates, P.A., a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision, and has been constructed in accordance with the plans and specifications approved by the City Engineer and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings. This Certification is based on site inspections by me or personnel under my direction, and survey information provided by ALS, Inc., NMPS number 7719.



1. ALL STATIONING IS CENTERLINE STATIONING

CURVE DATA - DESCRIBES CENTERLINE

$$\begin{aligned} \textcircled{1} \quad \Delta &= 38^{\circ}31'53'' \\ R &= 300.00' \\ T &= 104.86' \\ L &= 201.75' \end{aligned}$$

CURVE DATA - DESCRIBES FACE OF NEW CURE

①	$\Delta = 111^{\circ}19'17''$ $R = 25.00'$ $T = 36.59'$ $L = 48.57'$	②	$\Delta = 74^{\circ}08'26''$ $R = 25.00'$ $T = 18.89'$ $L = 32.35'$	③	$\Delta = 28^{\circ}09'22''$ $R = 28.00'$ $T = 70.22'$ $L = 137.60'$
④	$\Delta = 86^{\circ}02'20''$ $R = 25.00'$ $T = 23.32'$ $L = 37.53'$	⑤	$\Delta = 104^{\circ}42'06''$ $R = 25.00'$ $T = 32.21'$ $L = 45.54'$	⑥	$\Delta = 83^{\circ}34'44''$ $R = 25.00'$ $T = 22.34'$ $L = 36.47'$
⑦	$\Delta = 96^{\circ}25'16''$ $R = 25.00'$ $T = 27.97'$ $L = 42.07'$	⑧	$\Delta = 84^{\circ}20'01''$ $R = 25.00'$ $T = 22.64'$ $L = 36.80'$	⑨	$\Delta = 95^{\circ}39'59''$ $R = 25.00'$ $T = 27.60'$ $L = 41.74'$
⑩	$\Delta = 82^{\circ}47'33''$ $R = 25.00'$ $T = 22.04'$ $L = 36.13'$	⑪	$\Delta = 97^{\circ}11'53''$ $R = 25.00'$ $T = 28.36'$ $L = 42.41'$	⑫	$\Delta = 82^{\circ}47'33''$ $R = 25.00'$ $T = 22.04'$ $L = 36.13'$
⑬	$\Delta = 93^{\circ}23'36''$ $R = 25.00'$ $T = 26.53'$ $L = 40.75'$	⑭	$\Delta = 83^{\circ}34'44''$ $R = 25.00'$ $T = 22.34'$ $L = 36.47'$	⑮	$\Delta = 96^{\circ}25'16''$ $R = 25.00'$ $T = 27.97'$ $L = 42.07'$
⑯	$\Delta = 76^{\circ}48'04''$ $R = 25.00'$ $T = 19.82'$ $L = 33.51'$	⑰	$\Delta = 90^{\circ}11'13''$ $R = 25.00'$ $T = 25.08'$ $L = 39.35'$	⑱	$\Delta = 72^{\circ}26'14''$ $R = 312.00'$ $T = 76.17'$ $L = 149.41'$
⑲	$\Delta = 109^{\circ}09'58''$ $R = 25.00'$ $T = 35.16'$ $L = 47.63'$	⑳	$\Delta = 75^{\circ}36'21''$ $R = 25.00'$ $T = 19.39'$ $L = 32.99'$		

LEGEND

ARTERIAL PAVEMENT (6" AC)
 BLAKE
 THIS PROJECT

 ENTRANCE PAVEMENT
 (3 1/2" AC)
 THIS PROJECT

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2	6		6	4	5	6	.	8	9		1	3	0	3

 MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: ***EL RANCHO GRANDE I - UNIT 5B
MUSTANG RIDGE DR. SW
PAVING IMPROVEMENTS***

DESIGN REVIEW COMMITTEE

APPROVE

NOV 27 2002

DESIGN
REVIEW COMMITTEE

APPROVE
DEC 24 2002
CITY ENGINEER

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CITY PROJECT NO.	ZONE MAP NO.	22
645689	M-9&N-9	13 22

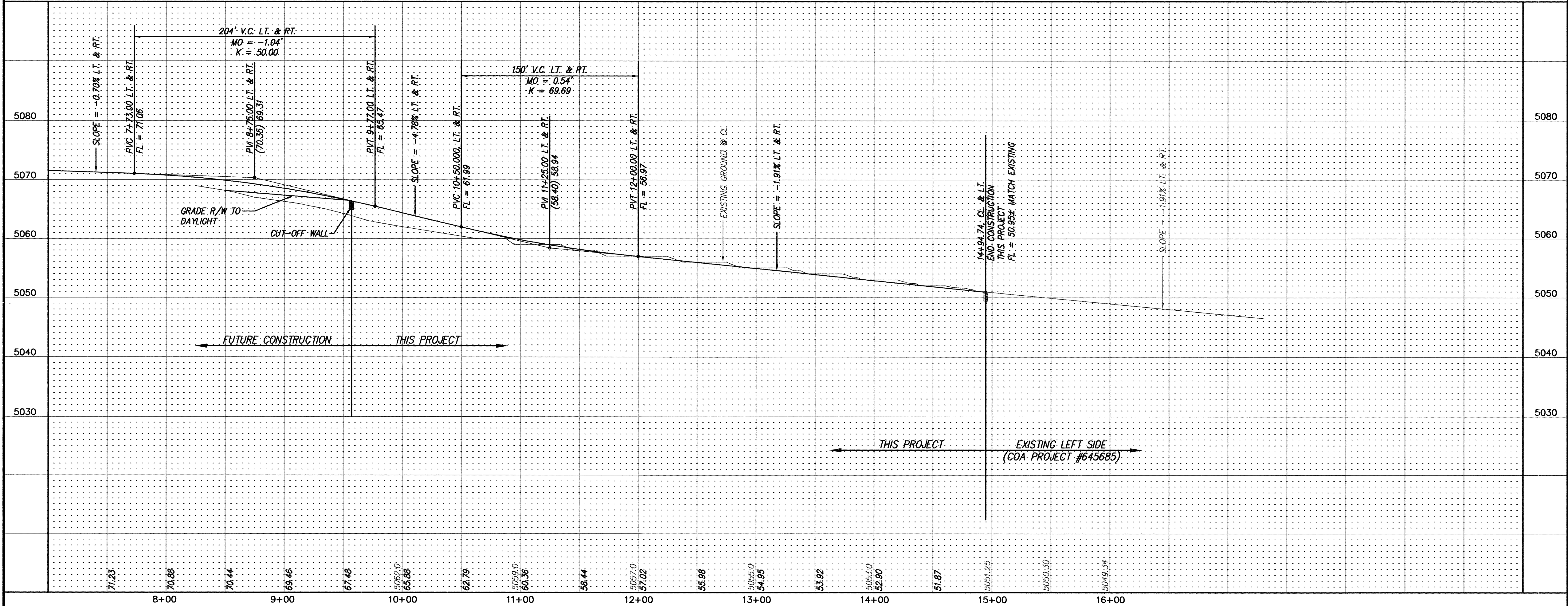
A2030 EL RANCHO GRANDE 5/ERG5/5BPLANS/2030-5B-PP11 11-04-02 NHE GJK

645689	M-9&N-9
--------	---------

22

13 22

SCANNED BY
MESA REPRO



PT. FL.	
1	65.39
2	65.67
3	65.94

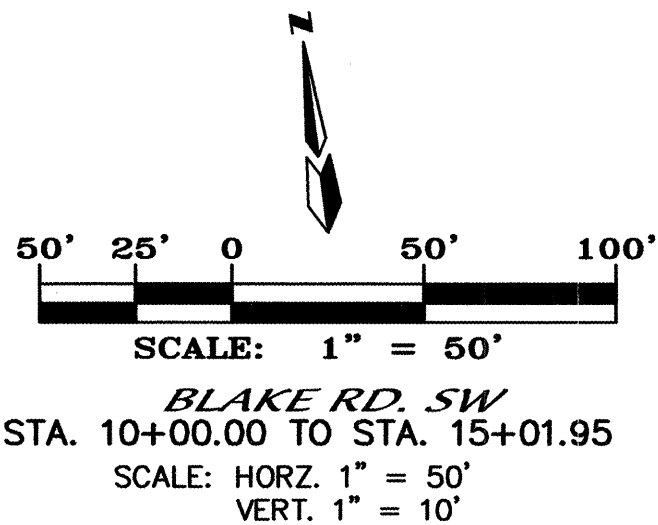
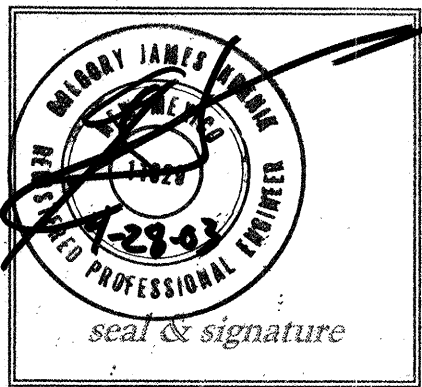
PT. FL.	
1	62.79
2	63.43
3	64.07

PT. FL.	
1	52.17
2	51.91
3	52.05

PT. FL.	
1	50.73
2	51.00
3	51.27

CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

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NOTES

1. ALL STATIONING IS CENTERLINE STATIONING.

CURVE DATA - DESCRIBES FACE OF NEW CURB

- ① $\Delta = 90^{\circ}00'00''$
 $R = 25.00'$
 $T = 25.00'$
 $L = 39.27'$
- ② $\Delta = 90^{\circ}00'00''$
 $R = 25.00'$
 $T = 25.00'$
 $L = 39.27'$
- ③ $\Delta = 98^{\circ}42'03''$
 $R = 25.00'$
 $T = 29.12'$
 $L = 43.07'$
- ④ $\Delta = 82^{\circ}47'33''$
 $R = 25.00'$
 $T = 22.04'$
 $L = 36.13'$

LEGEND

- ARTERIAL PAVEMENT (6" AC)
THIS PROJECT

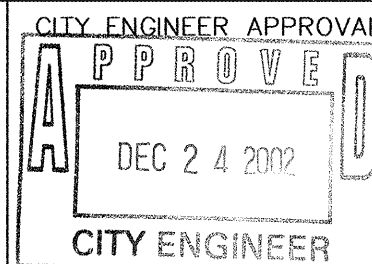
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
26 6456.89 1403

dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539



CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: EL RANCHO GRANDE I - UNIT 5B
BLAKE RD. SW
PAVING IMPROVEMENTS



LAST DESIGN UPDATE

CITY PROJECT NO. 645689 ZONE MAP NO. M-9 & N-9 SHEET OF 14 22



ENGINEER'S SEAL

DESIGNED BY GJK DATE 05/02
DRAWN BY NHE DATE 05/02
CHECKED BY DMG DATE 05/02

REVISIONS
NO. DATE REMARKS
BY

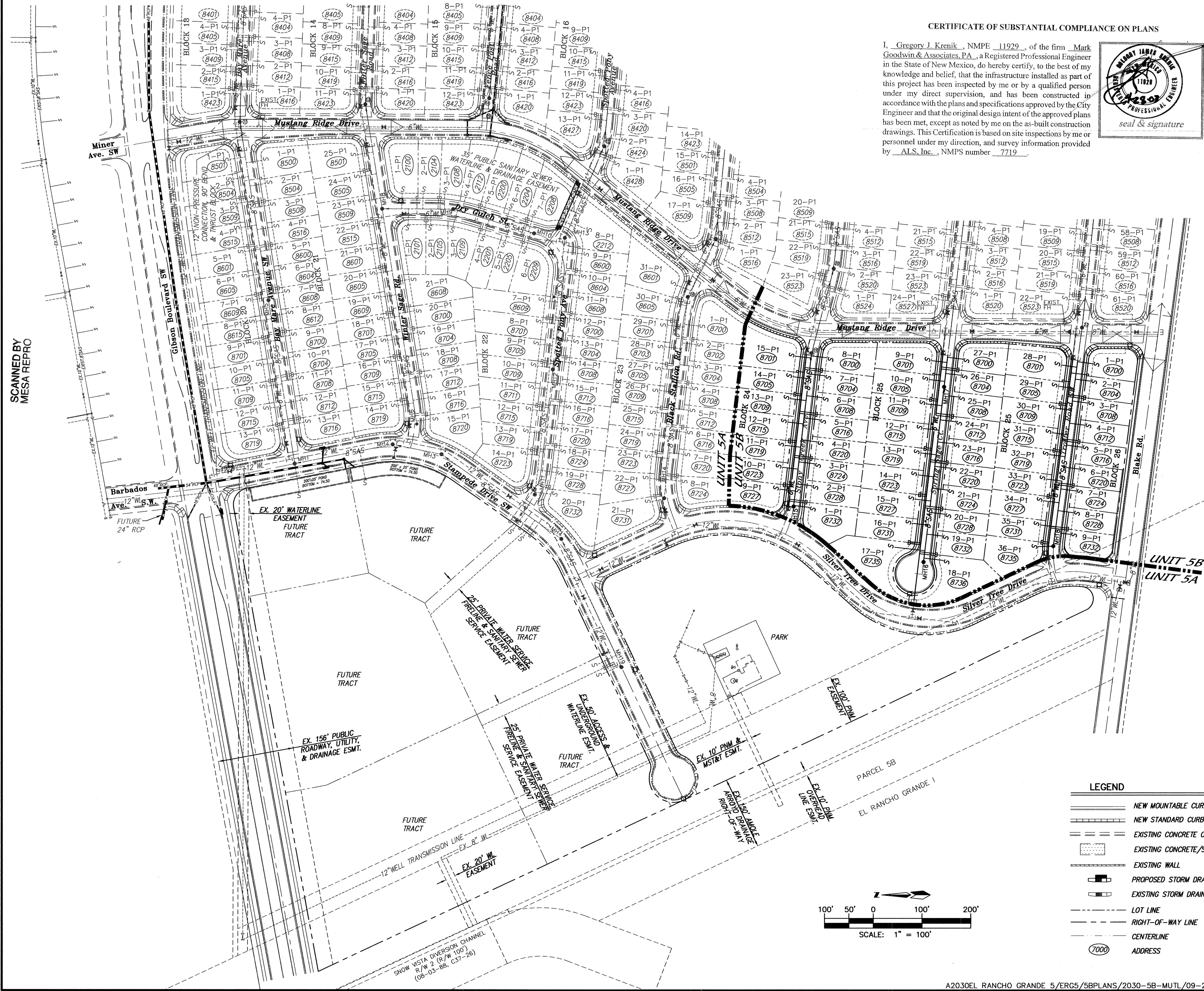
STATION "TRANS" IS LOCATED 6 MI. SOUTHWEST OF DOWNTOWN ALBUQUERQUE, IN THE R.O.W. OF A PLANS ELECTRIC CO-OP TRANS- MISSION LINE. TO REACH STATION FROM INTERSECTION OF CENTRAL AVE. & 98TH ST. SW, GO SOUTH ON 98TH ST. 1.2 MI. TO JUNCTION WITH GIBSON BLVD. & SNOW VISTA BLVD., THEN SOUTHEAST ALONG SNOW VISTA AND CO-OP ELECTRIC TRANSMISSION LINE 0.85 MI. TO Pylon NUMBERED "52". STATION IS JUST EAST OF THIS POINT. X = 354,889.45, Y = 1,471,822.67, G-G = 0.8966792(NAD 1927) T-M8" LOCATED ON SW COR. OF 98th & SNOW. NAD 28 EL. = 5147.87

CONTRACTOR NEW Concepts
INSPECTOR'S DATE 03
FIELD VERIFICATION BY ALG
CORRECTED BY ALG
RECORDED BY MICRO-FILM INFORMATION
DATE

STATIONING INFORMATION
FIELD NOTES
NO. BY DATE

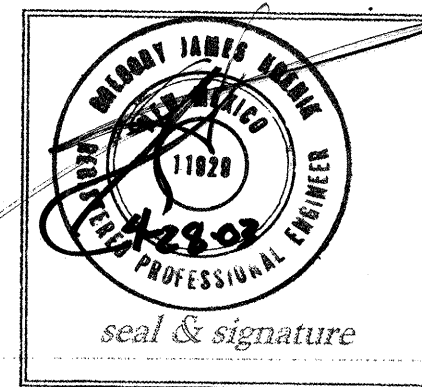
BENCH MARKS

SCANNED BY
MESA REPRO



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NOTES

- ALL FIRE HYDRANTS ARE 4' BURY UNLESS OTHERWISE SPECIFIED.

WATER SHUT-OFF NOTES

- ALL LINES THAT THIS PROJECT CONNECTS TO ARE STUB OUTS WITH VALVES, THERE ARE NO VALVES TO SHUT-OFF.

RESTRAINED JOINT LENGTH FOR BENDS, VALVES, DEAD ENDS (FT.)

PIPE SIZE	90°	45°	22.5°	11.25°	VALVE
6"	17'	7'	3'	2'	46'
8"	22'	9'	4'	2'	60'
12"	30'	12'	6'	3'	85'

LENGTH OF RESTRAINED PIPE ON EACH SIDE OF THE BEND. RESTRAIN BRANCH AT FITTING ONLY MINIMUM ATTACHED PIPE LENGTH, RUN SIDE OF TEE: 10.00 FEET.

RESTRAINED JOINT LENGTHS FOR REDUCERS (FT.)

PIPE SIZE	LARGE SIDE	SMALL SIDE
8"x6"	25'	33'

RESTRAINED JOINT LENGTH FOR TEES (FT.)

PIPE SIZE	RUN	BRANCH
12"x12"x8"	8'	5'
12"x12"x6"	5'	1'
8"x8"x6"	7'	5'
6"x6"x6"	10'	2'

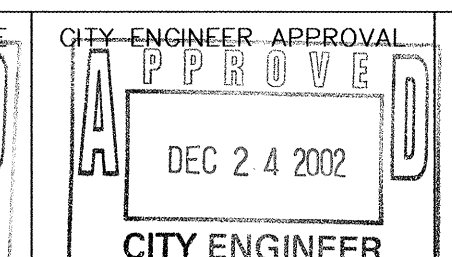
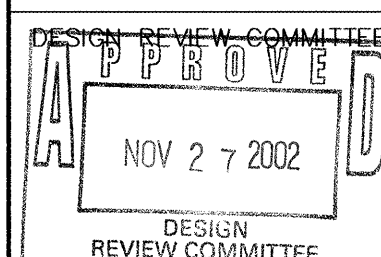
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
26 6456.89 1503

dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539



CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: EL RANCHO GRANDE I, UNIT 5B
MASTER UTILITY PLAN



MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO.

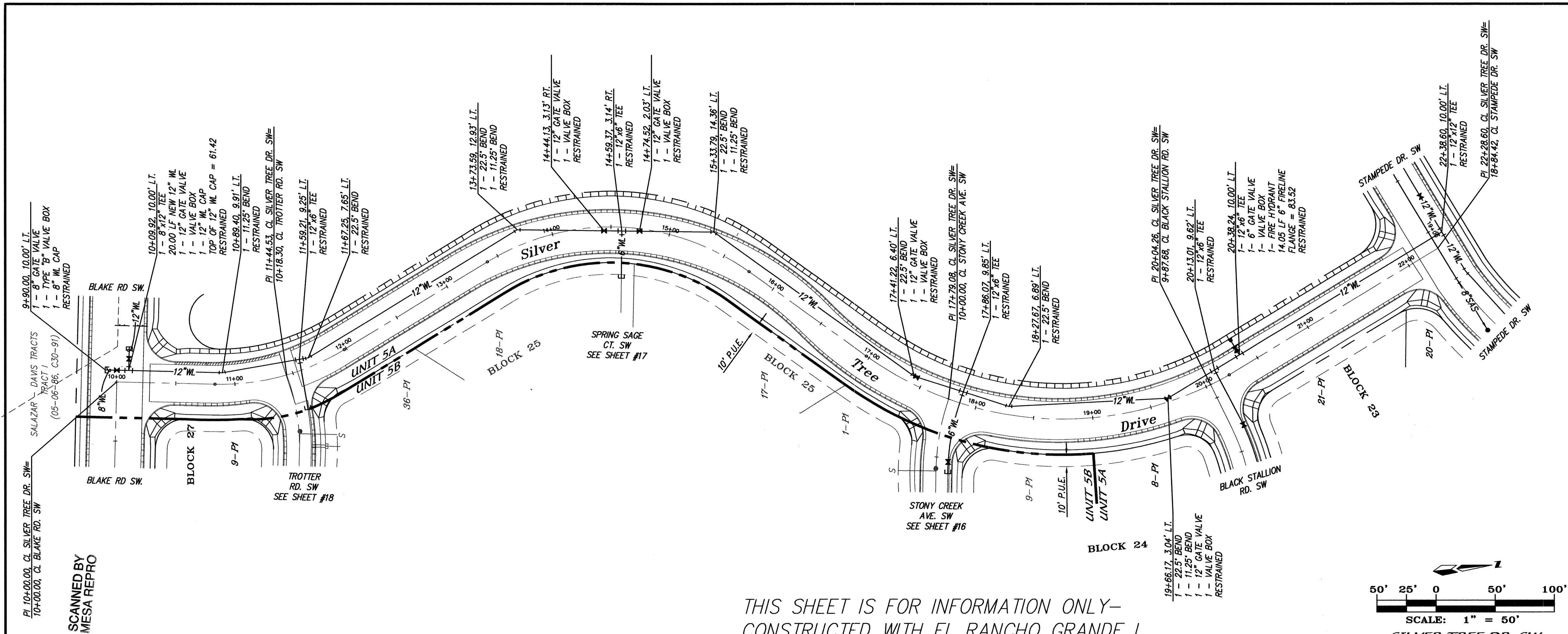
645689

ZONE MAP NO.

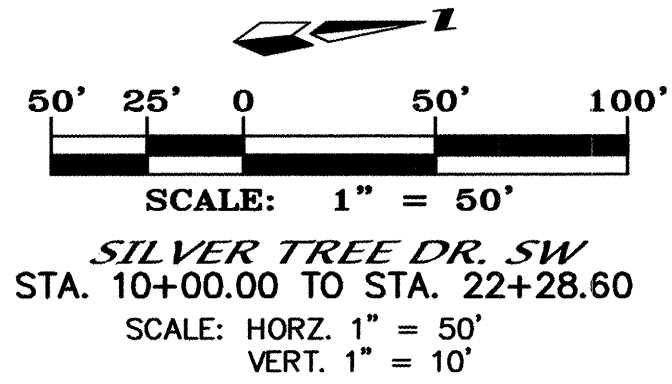
M-9 & N-9

SHEET OF

15 22



THIS SHEET IS FOR INFORMATION ONLY-
CONSTRUCTED WITH EL RANCHO GRANDE I,
UNIT 5A (C.O.A. PROJECT #645688)

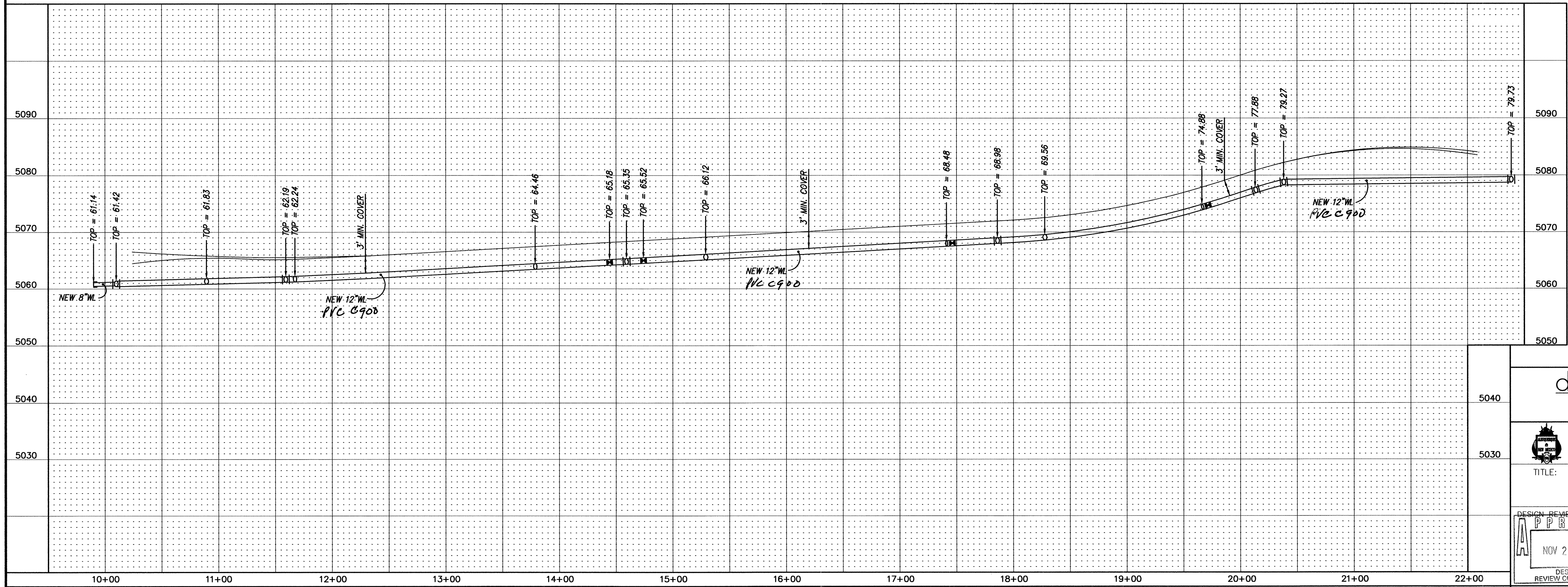


- NOTES
1. ALL STATIONING IS CENTERLINE STATIONING.
 2. SEE SHEET 22 OF 22 FOR WATER VALVE BOX DETAIL, WATER RING & COVER FOR VALVE BOX DETAIL AND WATER METER DETAIL.
 3. RISER REQUIRED WHEN INVERT AT P.U.E. IS GREATER THAN 2'-0" ABOVE MAIN LINE INVERT.

RESTRAINED JOINT LENGTH FOR BENDS, VALVES, DEAD ENDS (FT.)					
PIPE SIZE	90°	45°	22.5°	11.25°	VALVE
6"	17'	7'	3'	2'	46'
8"	22'	9'	4'	2'	60'
12"	30'	12'	6'	3'	85'

LENGTH OF RESTRAINED PIPE ON EACH SIDE OF THE BEND. RESTRAIN BRANCH AT FITTING ONLY MINIMUM ATTACHED PIPE LENGTH, RUN SIDE OF TEE: 10.00 FEET.

RESTRAINED JOINT LENGTH FOR TEES (FT.)		
PIPE SIZE	RUN	BRANCH
12"x12"x8"	8'	5'
12"x12"x6"	5'	1'
6"x6"x6"	10'	2'



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
26 64 56 .89 1903

dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

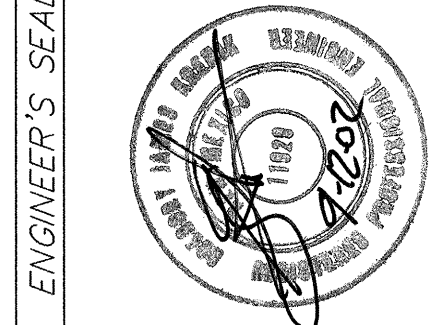
TITLE: EL RANCHO GRANDE I - UNIT 5B
SILVER TREE DR. SW
UTILITY IMPROVEMENTS

DESIGN REVIEW COMMITTEE
APPROVED
NOV 27 2002
DESIGN REVIEW COMMITTEE

CITY ENGINEER APPROVAL
APPROVED
DEC 24 2002
CITY ENGINEER

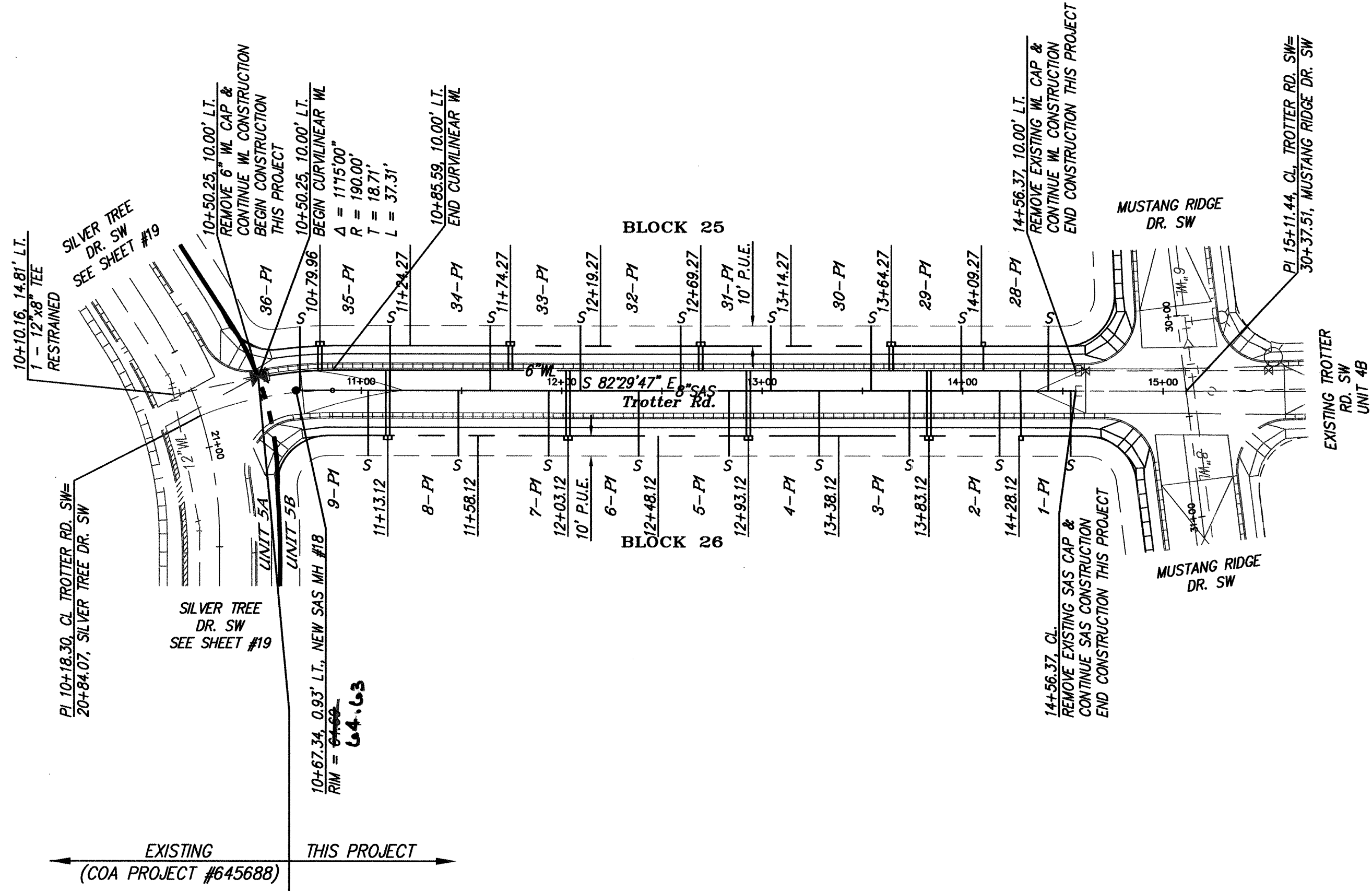
LAST DESIGN UPDATE
MO./DAY/YR.
MO./DAY/YR.

CITY PROJECT NO. 645689 ZONE MAP NO. M-9 & N-9 SHEET 19 OF 22



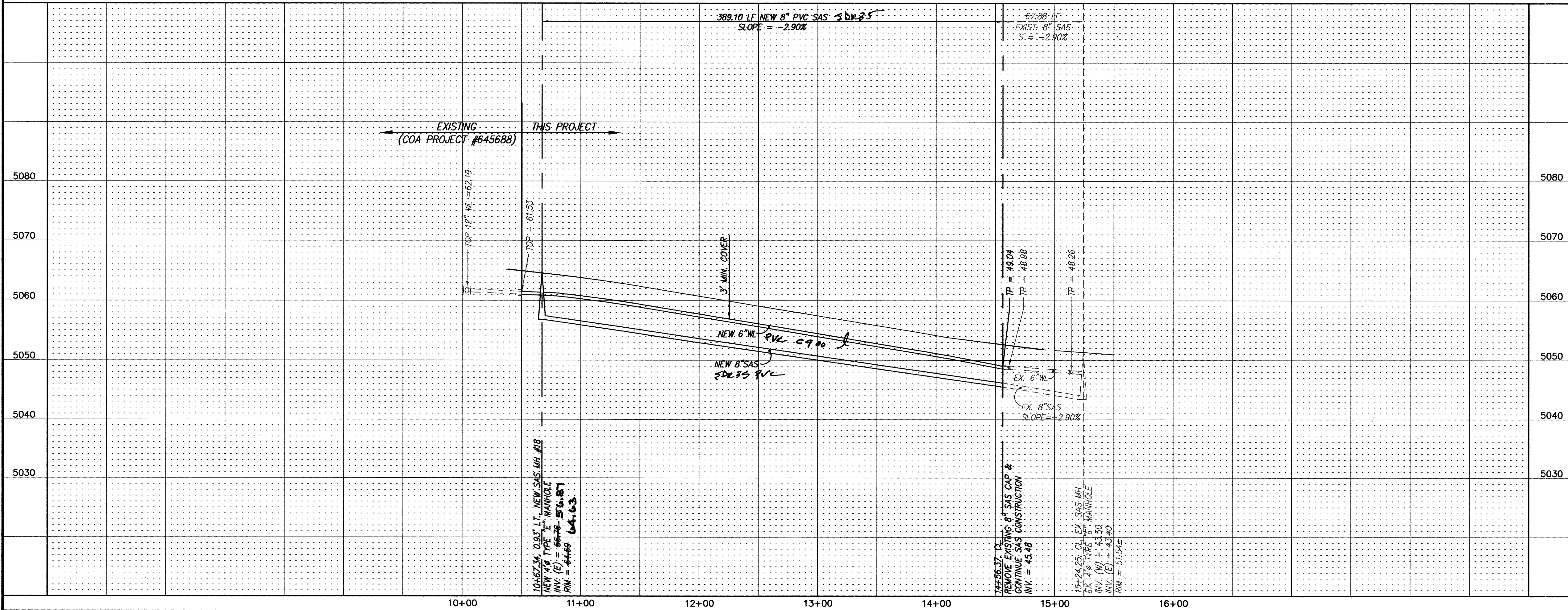
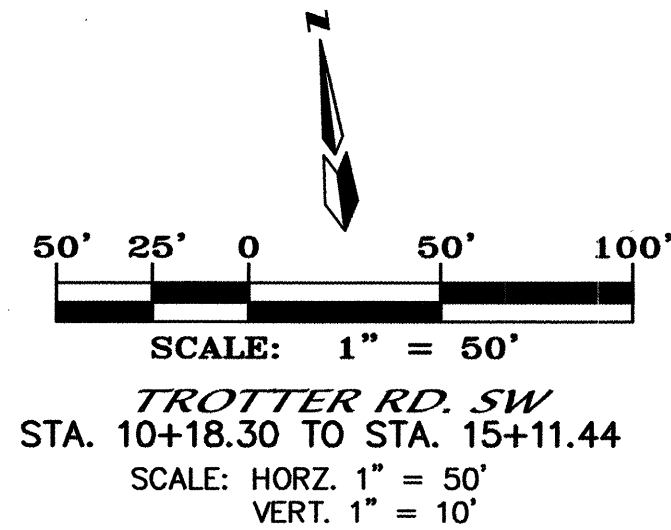
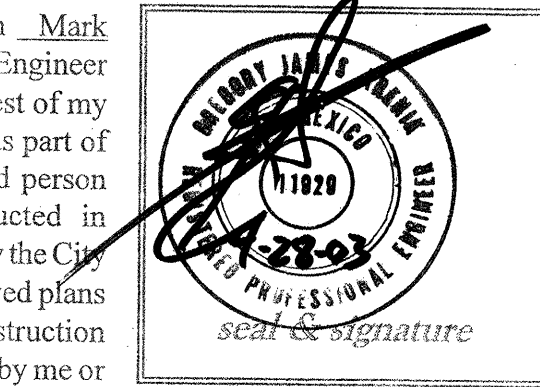
SURVEY INFORMATION			
NO.	BY	DATE	FIELD NOTES
BENCH MARKS			
STATION "TRANS" IS LOCATED 6 MI. SOUTHWEST OF DOWNTOWN ALBUQUERQUE, IN THE R.O.M. OF A PLAINS ELECTRIC CO-OP TRANSMISSION LINE. TO REACH STATION FROM INTERSECTION OF CENTRAL AVE. & 98TH ST. SW. GO SOUTH ON 98TH ST. 1.2 MI. TO JUNCTION WITH OGBON BLVD. & SNOW VISTA BLVD. THEN SOUTHEAST ALONG SNOW VISTA AND CO-OP ELECTRIC TRANSMISSION LINE 0.85 MI. TO Pylon NUMBERED "92". STATION IS JUST EAST OF THIS POINT. X = 354,899.45, Y = 1,471,822.67, G-G = 0.3996792 (NAD 1927) 7-149" LOCATED ON SW COR. OF 98th & SAGE. NODD 29 EL. = 5142.87			
AS BUILT INFORMATION			
CONTRACTOR	NEW CONCEPTS	WORK	DATE
INSPECTOR	DATE	DATE	DATE
FIELD ENGINEER	DATE	DATE	DATE
VERIFICATION BY	DATE	DATE	DATE
CORRECTION BY	DATE	DATE	DATE
RECORDED BY	DATE	DATE	DATE
NO.	DATE	DATE	DATE

SCANNED BY
MESA REPRO



CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

I, Gregory J. Krenik, NMPE 11929, of the firm Mark Goodwin & Associates, P.A., a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision, and has been constructed in accordance with the plans and specifications approved by the City Engineer and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings. This Certification is based on site inspections by me or personnel under my direction, and survey information provided by ALS, Inc., NMPS number 7719.



- NOTES
1. ALL STATIONING IS CENTERLINE STATIONING.
 2. SEE SHEET 22 OF 22 FOR WATER VALVE BOX DETAIL, WATER RING & COVER FOR VALVE BOX DETAIL, AND WATER METER DETAIL.
 3. RISER REQUIRED WHEN INVERT AT P.U.E. IS GREATER THAN 2'-0" ABOVE MAIN LINE INVERT.

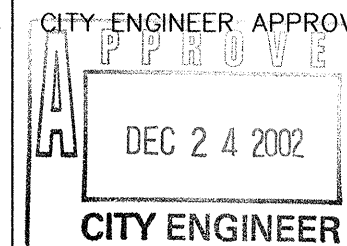
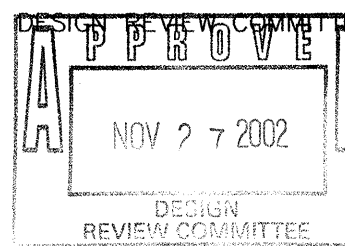
SANITARY SEWER SERVICES				
BLOCK	LOT	STATION AT PUE	INV. ELEV. AT PUE	LENGTH AT PUE
25	28-P1	14+42.80	47.77	32.00'
25	29-P1	13+99.27	49.12	32.00'
25	30-P1	13+54.27	50.43	32.00'
25	31-P1	13+04.27	51.89	32.00'
25	32-P1	12+59.27	53.21	32.00'
25	33-P1	12+09.27	54.67	32.00'
25	34-P1	11+64.27	55.99	32.00'
25	35-P1	11+14.27	57.45	32.00'
25	36-P1	10+69.96	58.72	31.37'
26	1-P1	14+53.90	47.52	32.00'
26	2-P1	14+18.12	48.57	32.00'
26	3-P1	13+73.12	49.88	32.00'
26	4-P1	13+28.12	51.20	32.00'
26	5-P1	12+83.12	52.51	32.00'
26	6-P1	12+38.12	53.83	32.00'
26	7-P1	11+93.12	55.14	32.00'
26	8-P1	11+48.12	56.46	32.00'
26	9-P1	11+03.12	57.77	32.00'

RESTRAINED JOINT LENGTH FOR BENDS, VALVES, DEAD ENDS (FT.)				
PIPE SIZE	90°	45°	22.5°	11.25° VALVE
6"	17'	7'	3'	2'
8"	22'	9'	4'	2'
12"	30'	12'	6'	3'
LENGTH OF RESTRAINED PIPE ON EACH SIDE OF THE BEND. RESTRAIN BRANCH AT FITTING ONLY MINIMUM ATTACHED PIPE LENGTH, RUN SIDE OF TEE: 10.00 FEET.				
RESTRAINED JOINT LENGTH FOR TEES (FT.)				
PIPE SIZE	RUN	BRANCH		
12"x12"x8"	8'	5'		
12"x12"x6"	5'	1'		
6"x6"x6"	10'	2'		

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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: EL RANCHO GRANDE I - UNIT 5B
TROTTER RD. SW
UTILITY IMPROVEMENTS



LAST DESIGN UPDATE

CITY PROJECT NO.

ZONE MAP NO. M-9 & N-9

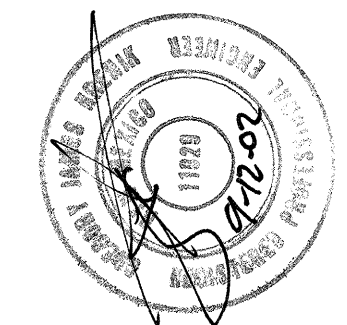
SHEET 18 OF 22

26 64568 89 1803

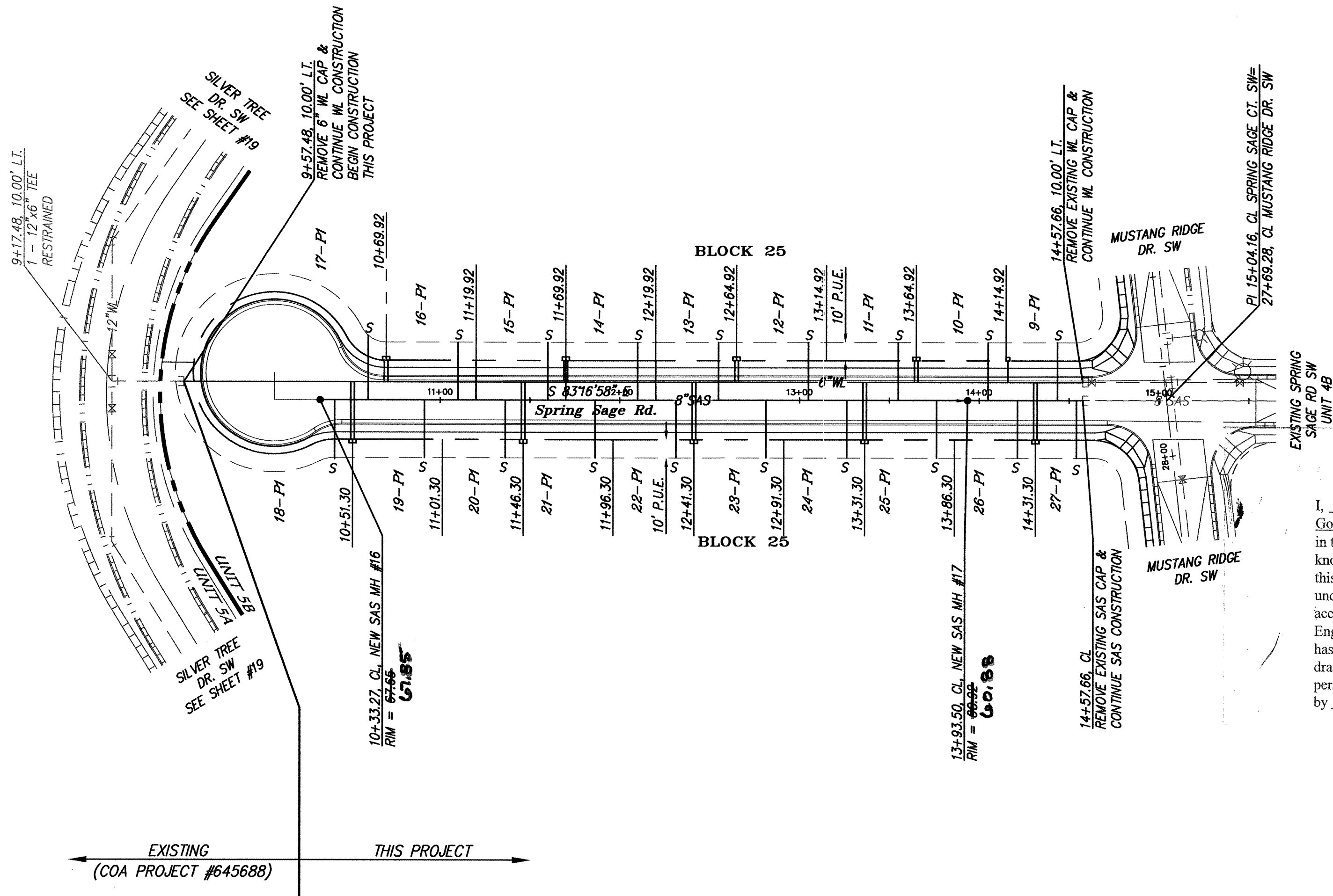
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CONTRACTOR	NEW CONCEPTS	DATE	05/03
WORK STATIONED BY	ALS	DATE	11/04
INSPECTOR'S FIELD VERIFICATION BY	ALS	DATE	11/03
CORRECTED BY	ALS	DATE	11/03
MICRO-FILM INFORMATION			
RECORDED BY		DATE	
NO.			

SURVEY INFORMATION			
FIELD NOTES	BY	DATE	
NO.			

ENGINEER'S SEAL			
STATION "TRANS" IS LOCATED 6 MI. SOUTHWEST OF DOWNTOWN ALBUQUERQUE, IN THE R.O.W. OF A PLANS ELECTRIC CO-OP TRANS-MISSION LINE. TO REACH STATION FROM INTERSECTION OF CENTRAL AVE. & 98TH ST. SW. GO SOUTH ON 98TH ST. 1.2 MI. TO JUNCTION WITH GIBSON BLVD. & SNOW MSTA BLVD. THEN SOUTHEAST ALONG SNOW MSTA AND CO-OP ELECTRIC TRANSMISSION LINE 0.85 MI. TO Pylon NUMBERED "52". STATION IS JUST EAST OF THIS POINT. X = 354,899.45, Y = 1,471,822.67, G-G = 0.99967921 (NAD 1927)	REMARKS	DATE	05/02
	DESIGNED BY GJK	DATE	05/02
	DRAWN BY NHE	DATE	05/02
	CHECKED BY DMG	DATE	05/02

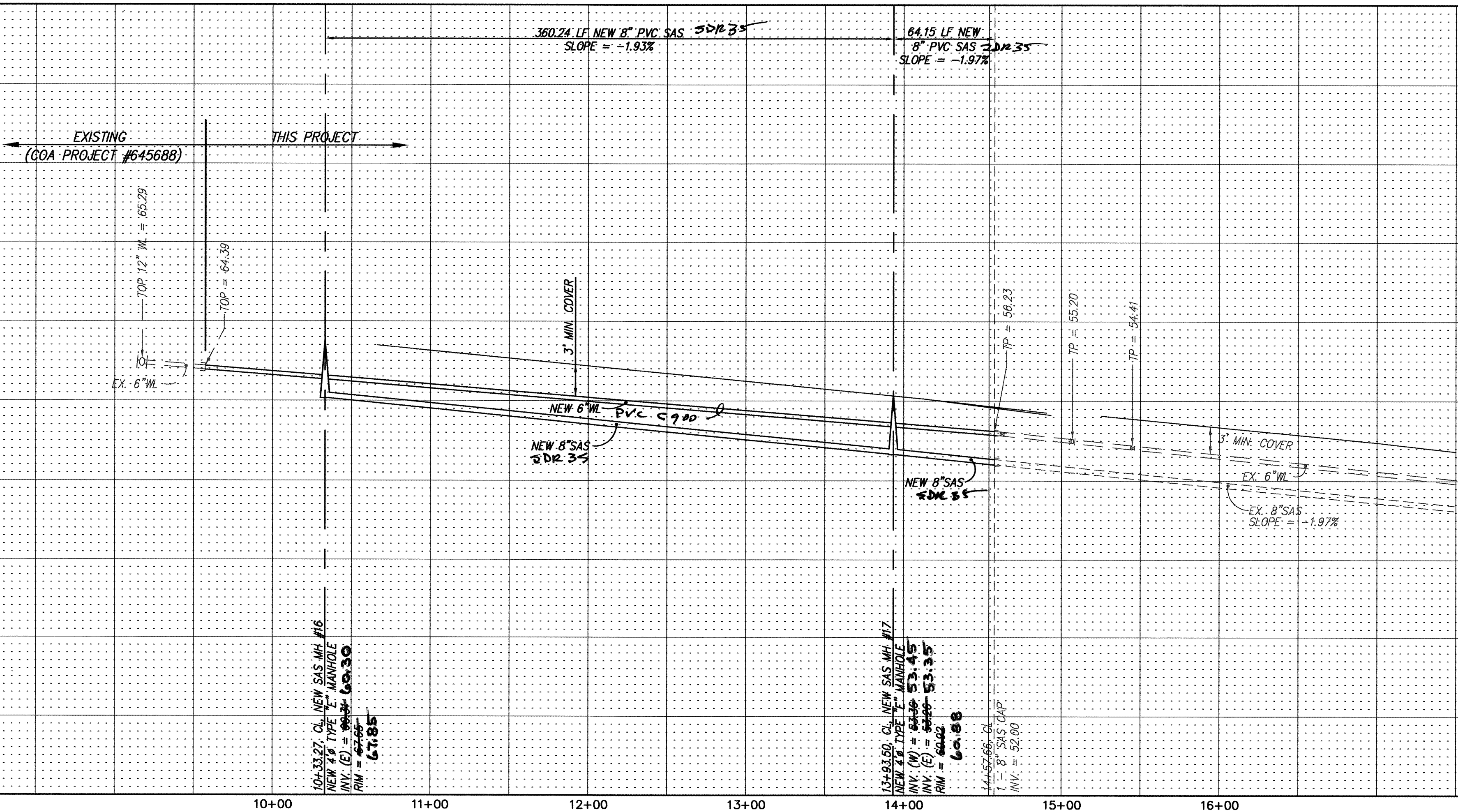
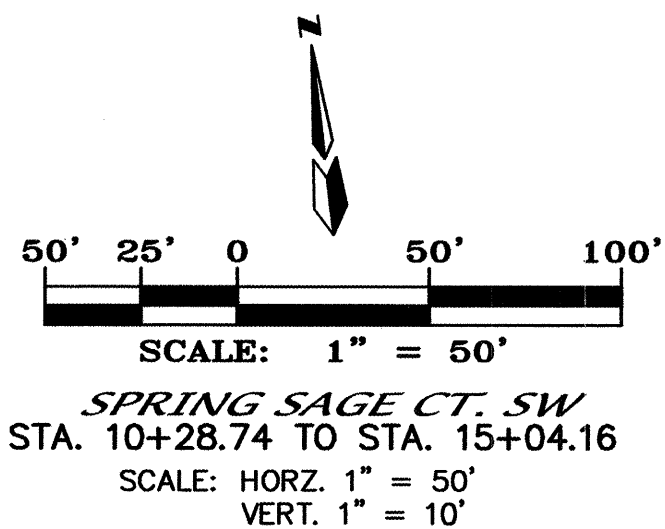
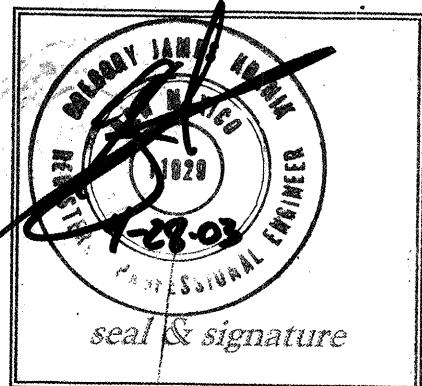


SCANNED BY
MESA REPHO



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I, Gregory J. Krenik, NMPE 11929, of the firm Mark Goodwin & Associates, P.A., a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision, and has been constructed in accordance with the plans and specifications approved by the City Engineer and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings. This Certification is based on site inspections by me or personnel under my direction, and survey information provided by ALS, Inc., NMPS number 7719.



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- RISER REQUIRED WHEN INVERT AT P.U.E. IS GREATER THAN 2'-0" ABOVE MAIN LINE INVERT.

SANITARY SEWER SERVICES

BLOCK	LOT	STATION AT PUE	INV. ELEV. AT PUE	LENGTH AT PUE
25	9-P1	14+43.52	54.26	32.00'
25	10-P1	14+04.92	55.06	32.00'
25	11-P1	13+54.92	56.03	32.00'
25	12-P1	13+04.92	57.01	32.00'
25	13-P1	12+54.92	57.99	32.00'
25	14-P1	12+04.92	58.87	32.00'
25	15-P1	11+59.92	59.85	32.00'
25	16-P1	11+09.92	60.84	32.00'
25	17-P1	10+59.92	62.39	35.82'
25	18-P1	10+41.30	62.18	32.82'
25	19-P1	10+91.30	61.20	32.00'
25	20-P1	11+86.30	60.32	32.00'
25	21-P1	11+81.30	59.34	32.00'
25	22-P1	12+31.30	58.45	32.00'
25	23-P1	12+81.30	57.47	32.00'
25	24-P1	13+26.30	56.59	32.00'
25	25-P1	13+76.30	55.61	32.00'
25	26-P1	14+21.30	54.72	32.00'
25	27-P1	14+54.10	54.13	32.00'

AS BUILT INFORMATION

CONTRACTOR	NEW CONSTRUCTION
ALS	ALS
DATE	DATE
INSPECTOR'S	INSPECTOR'S
DATE	DATE
FIELD	FIELD
DATE	DATE
VERIFICATION BY	VERIFICATION BY
DATE	DATE
CORRECTED BY	CORRECTED BY
DATE	DATE
MICRO-FILM INFORMATION	
RECORDED BY	
NO.	

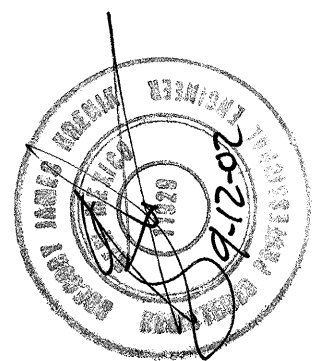
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STATION "TRANS" IS LOCATED 6 MI. SOUTHWEST OF DOWNTOWN ALBUQUERQUE, IN THE R.O.W. OF A PLAINS ELECTRIC CO-OP TRANS-MISSION LINE. TO REACH STATION FROM INTERSECTION OF CENTRAL AVE. & 98TH ST. SW. GO SOUTH ON 98TH ST. 1.2 MI. TO JUNCTION WITH GIBSON BLVD. & SNOW MSTA BLVD. THEN SOUTHEAST ALONG SNOW MSTA AND CO-OP ELECTRIC TRANSMISSION LINE 0.85 MI. TO Pylon NUMBERED "52". STATION IS JUST EAST OF THIS POINT. X = 354,899.45, Y = 1,471,822.67, G-C = 0.9996792 (MAD 1927) 7-INCH LOCATED ON SW COR. OF 98th & SAGE. NGD 29 EL. = 5147.87

SURVEY INFORMATION

FIELD NOTES	DATE
NO.	BY

ENGINEER'S SEAL



RESTRAINED JOINT LENGTH FOR BENDS, VALVES, DEAD ENDS (FT.)					
PIPE SIZE	90°	45°	22.5°	11.25°	VALVE
6"	17'	7'	3'	2'	46'
8"	22'	9'	4'	2'	60'
12"	30'	12'	6'	3'	85'

LENGTH OF RESTRAINED PIPE ON EACH SIDE OF THE BEND. RESTRAIN BRANCH AT FITTING ONLY MINIMUM ATTACHED PIPE LENGTH, RUN SIDE OF TEE: 10.00 FEET.

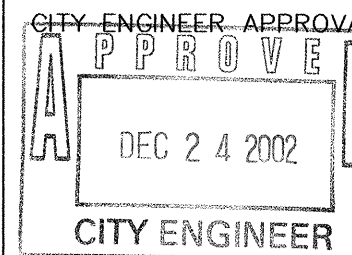
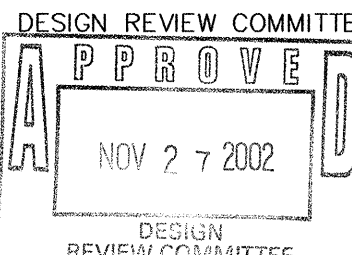
RESTRAINED JOINT LENGTH FOR TEES (FT.)		
PIPE SIZE	RUN	BRANCH
12"x12"x8"	8'	5'
12"x12"x6"	5'	1'
6"x6"x6"	10'	2'

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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: EL RANCHO GRANDE I - UNIT 5B
SPRING SAGE CT. SW
UTILITY IMPROVEMENTS



LAST DESIGN UPDATE

CITY PROJECT NO.

ZONE MAP NO.

SHEET OF

A2030 EL RANCHO GRANDE 5/ERGS/5BPLANS/2030-5B-UT6/09-20-02/ NHE MJR

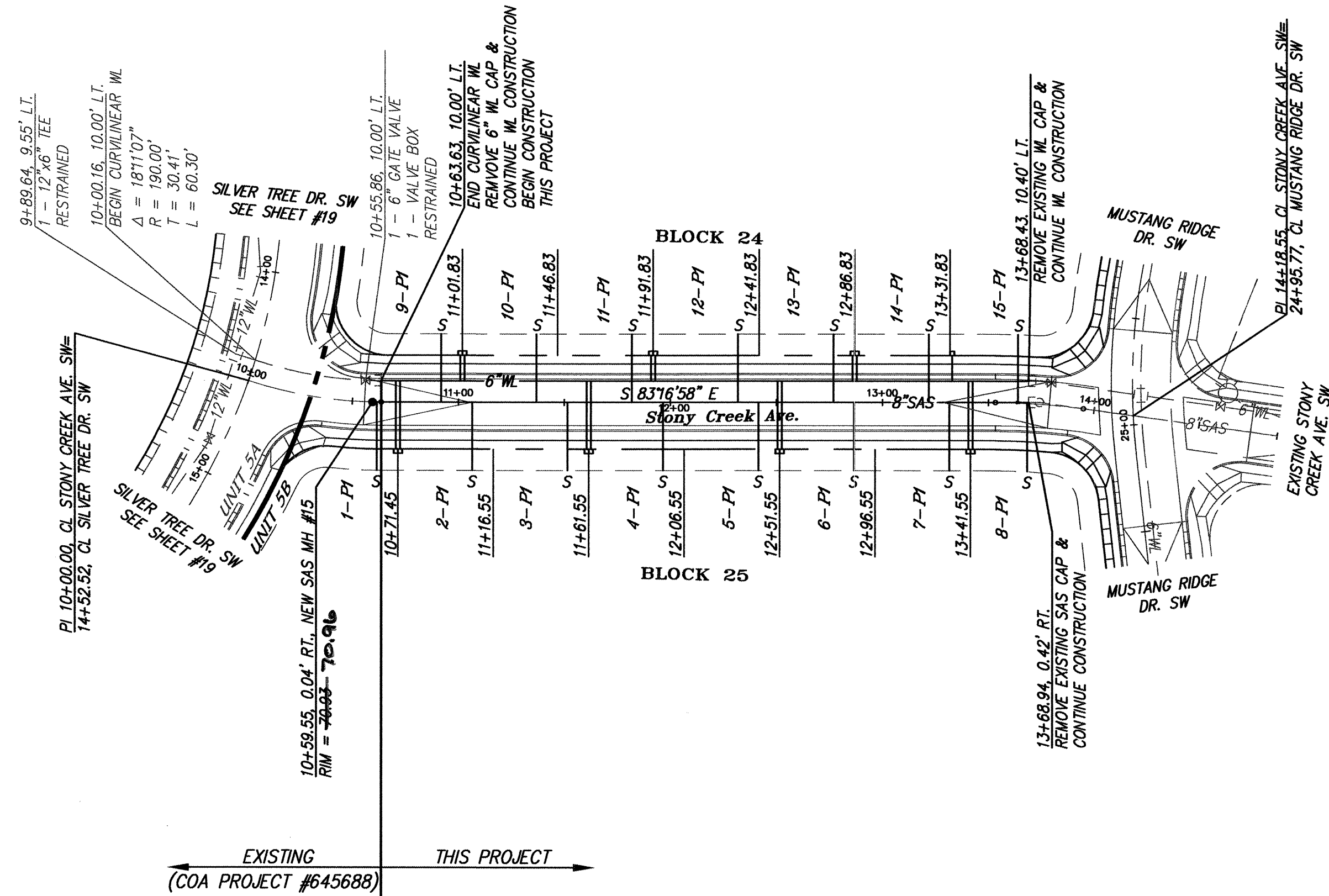
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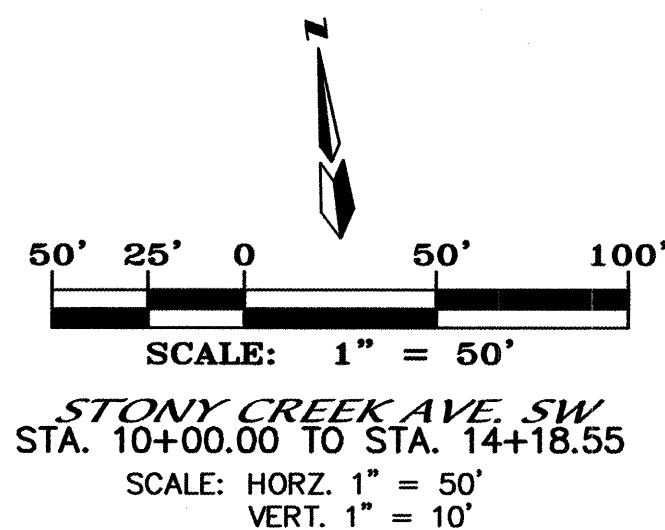
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
26 6456.89 1703

SCANNED BY
MESA REPRO



CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

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- RISER REQUIRED WHEN INVERT AT P.U.E. IS GREATER THAN 2'-0" ABOVE MAIN LINE INVERT.

SANITARY SEWER SERVICES

BLOCK	LOT	STATION AT PUE	INV. ELEV. AT PUE	LENGTH AT PUE
24	9-P1	10+91.83	65.25	32.00'
24	10-P1	11+36.83	64.27	32.00'
24	11-P1	11+81.83	63.29	32.00'
24	12-P1	12+31.83	62.20	32.00'
24	13-P1	12+76.83	61.22	32.00'
24	14-P1	13+21.83	60.35	32.00'
24	15-P1	13+62.91	59.34	31.82'
25	1-P1	10+61.45	65.26	32.00'
25	2-P1	11+06.55	64.93	32.00'
25	3-P1	11+51.55	63.95	32.00'
25	4-P1	11+96.55	62.97	32.00'
25	5-P1	12+41.55	61.99	32.00'
25	6-P1	12+86.55	61.01	32.00'
25	7-P1	13+31.55	60.03	32.00'
25	8-P1	13+70.07	59.22	32.41'

AS BUILT INFORMATION

CONTRACTOR

STATION

FIELD NOTES

ENGINEER'S SEAL

REMARKS

NO. DATE

DESIGNED BY

DRAWN BY

CHECKED BY

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SCANNED BY
MESA REPRO

- [PHI-MAIN\PROJECTS\97177\TRANS\DESIGN\SIGNAL\CITYSIGN.DWG]

26. ADVANCE WARNING SIGNS SHALL BE 36"x36" MIN. WITH SUPER ENGINEERING GRADE SHEETING OR BETTER. MOUNTING HEIGHT AT TOP OF SIGN SHALL BE THE SAME AS FOR A 48" SIGN AS INDICATED IN THE M.U.T.C.D.
27. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORKSITE. ALL GRAFFITI SHALL BE PROMPTLY REMOVED FROM ALL EQUIPMENT, BOTH PERMANENT AND TEMPORARY.



THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET.

SPEED LIMIT (MPH)	TAPER LENGTH(L) (FEET)			MINIMUM NUMBER OF DEVICES FOR TAPER	MAXIMUM DEVICE SPACING IN FEET	
	10' LANE	11' LANE	12' LANE		ALONG TAPER	AFTER TAPER
20	70	75	80	5	20	20
25	105	115	125	6	25	25
30	150	165	180	7	30	30
35	205	225	245	8	35	35
40	270	295	320	9	40	40
45	450	495	540	13	45	45
50	500	550	600	13	50	50
55	550	605	660	13	55	55

SPEED MILES PER HOUR	MINIMUM BETWEEN SIGNS	DISTANCE IN FEET FROM LAST SIGN TO TAPER
0-20	10 X SPEED LIMIT	10 X SPEED LIMIT
25-30	10 X SPEED LIMIT	10 X SPEED LIMIT
30-35	10 X SPEED LIMIT	10 X SPEED LIMIT
40-45	10 X SPEED LIMIT	10 X SPEED LIMIT
50-60	10 X SPEED LIMIT	10 X SPEED LIMIT

TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPER:	
MERGING TAPER	L MINIMUM
SHIFTING TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/2 L MINIMUM
TWO-WAY TRAFFIC TAPER	100 FEET MAXIMUM
DOWNSTREAM TAPERS	100 FEET PER LANE

<u>SPEED LIMIT</u>	
40 MPH OR LESS	$L = \frac{WS^2}{60}$
40 MPH OR GREATER	$L = W \times S$

L = TAPER LENGTH
W = WIDTH OF OFFSET IN FEET
S = POSTED SPEED OR OFF-PEAK 85-PERCENTILE SPEED IN MPH

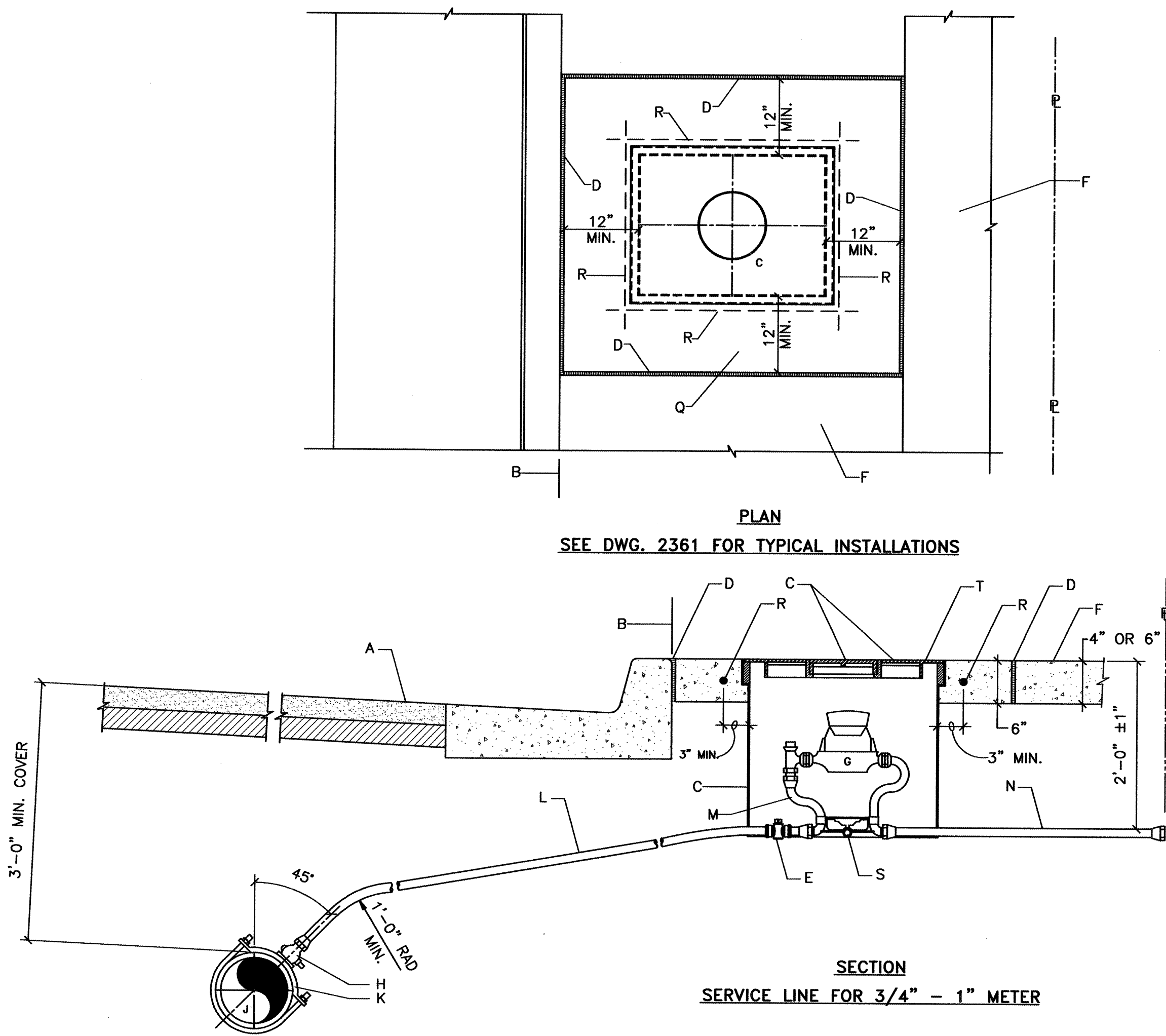
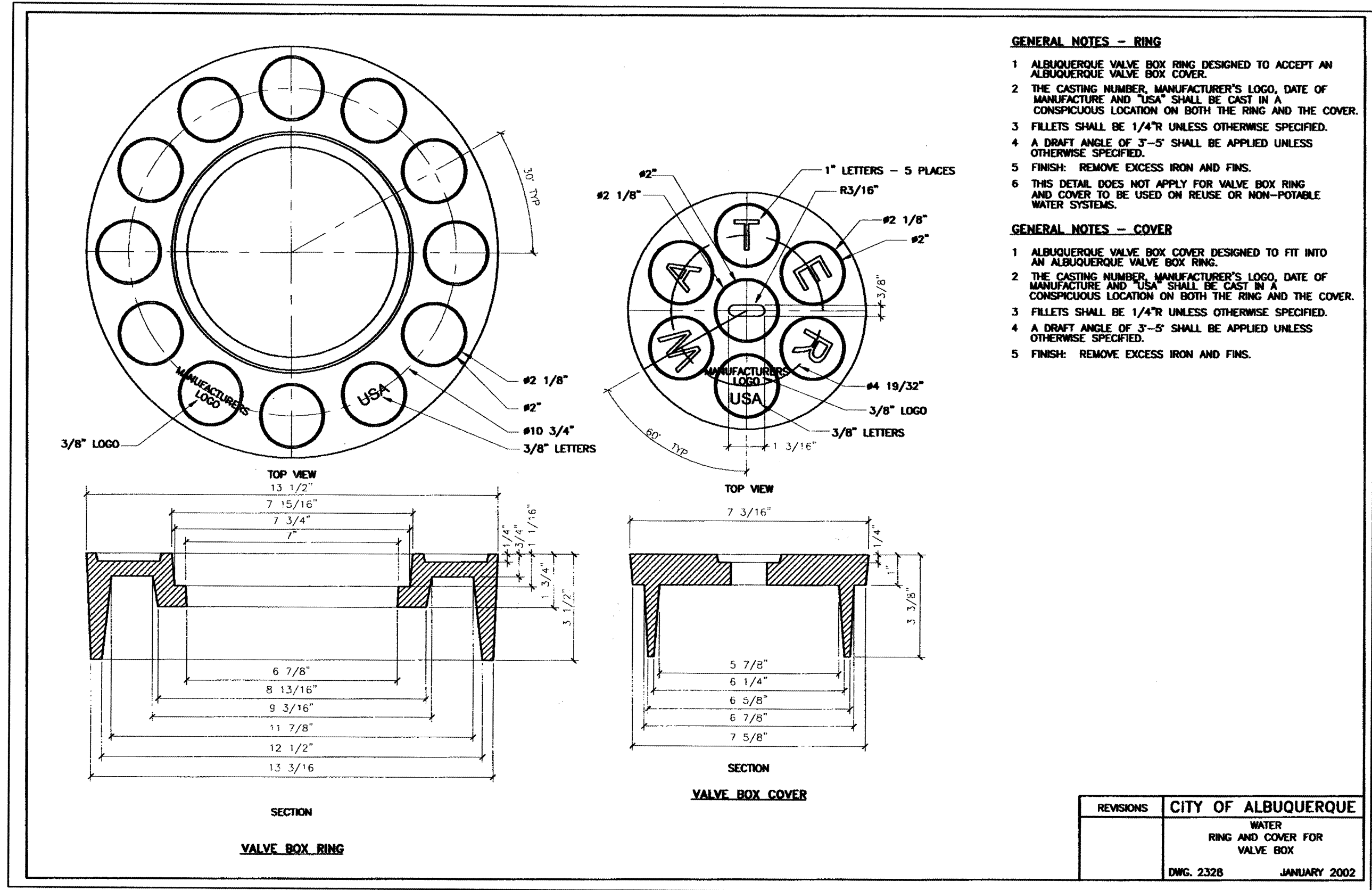
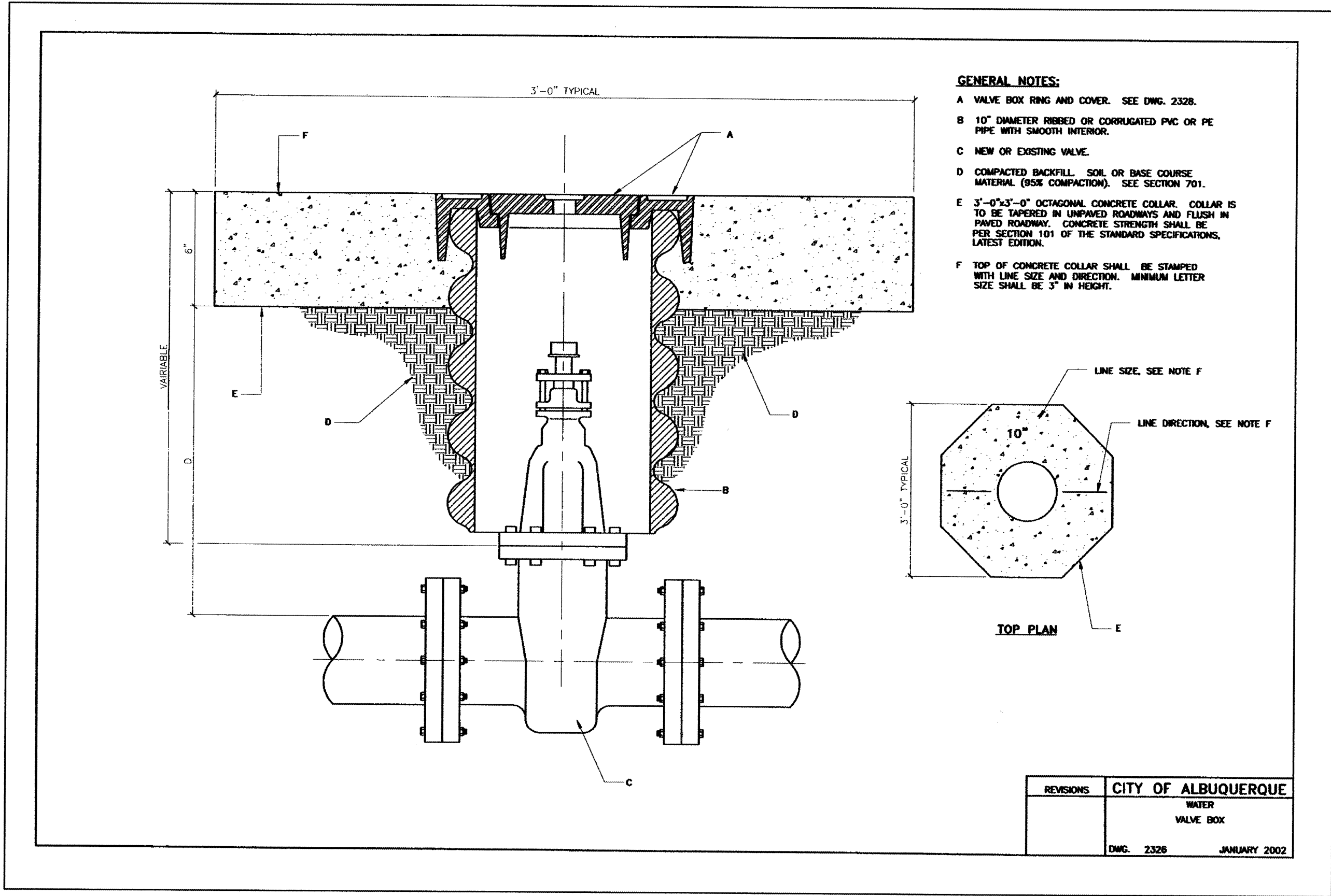
ENGINEER'S SEAL		SURVEY INFORMATION		BENCH MARKS		AS-BUILT INFORMATION	
		FIELD NOTES					
J.D.L.	J.D.L.	NO.	BY	DATE	WORK STAGED BY	CONTRACTOR	DATE
<u>A</u>	9/25/97	ADD NOTE NO. 27				NEW	CONCEPTS
<u>A</u>	9/24/97	REVISED NOTE NO. 26				AIS	DATE 03
<u>A</u>	9/24/97	REVISED NOTE NO. 19				META	DATE 4/03
<u>A</u>	9/24/97	REVISED NOTE NO. 11				AIS	DATE 4/03
BY	NO.	DATE				AIS	DATE 5/03
REMARKS						AIS	DATE 5/03
REVISIONS							
DESIGN							
DESIGNED BY BOHANNAN HUSTON		DATE 5-97					
DRAWN BY BOHANNAN HUSTON		DATE 5-97					
CHECKED BY BOHANNAN HUSTON		DATE 5-97					

 CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP			
TITLE: <i>EL RANCHO GRANDE I - UNIT 5B</i> <i>TRAFFIC CONTROL</i>			
DESIGN REVIEW COMMITTEE C.O.A. STANDARD		CITY ENGINEER APPROVAL C.O.A. STANDARD	
		LAST DESIGN UPDATE	MO./DAY/YR.
			MO./DAY/YR.
			MO./DAY/YR.
			MO./DAY/YR.
			MO./DAY/YR.
CITY PROJECT NO. <i>645689</i>		ZONE MAP NO. <i>M-9 & N-9</i>	
		SHEET	OF
		<i>20</i>	<i>22</i>

A2030 EL RANCHO GRANDE 5/ERG5/5BPLANS/2030-5B-CITYTRAF 9-10-02 NHE

F:\A020B5\A2030 EL RANCHO GRANDE 5\ERG5\5B PLANS\WAT-DET.dwg, Model, 09/10/02, 09:50:55 AM, Mark Goodwin & Associates Plotted by NHE

SCANNED BY
MESA REPRO



GENERAL NOTES:

- 1 THE METER SHALL BE SET UTILIZING A COPPER-SETTER. COPPER-SETTER HEIGHT 10" FOR 1" METER. 7" FOR 3/4" METER.
- 2 THE VALVE AND METER REGISTER BOX SHALL BE LOCATED UNDER THE LID OPENING. WHERE TWO METERS ARE TO BE INSTALLED IN A SINGLE METER BOX, THE METER REGISTERS SHALL BE WITHIN READING RANGE OF THE LID OPENING.
- 3 METER BOX LOCATION TO CONFORM TO DWG. 2361.
- 4 WHEN CONTRACTOR DOES NOT INSTALL METER, CONTRACTOR SHALL PROVIDE REMOVABLE PLUGS FOR END OF COPPER-SETTER.
- 5 EXISTING CONCRETE TO BE SAWCUT.

CONSTRUCTION NOTES:

- A STREET SURFACE.
- B BACK OF CURB.
- C CAST IRON METER BOX, COVER AND LID. SEE DWG. 2368 OR 2369.
- D 1/2" EXPANSION JOINT.
- E CURB STOP, LOCATE INSIDE METER BOX.
- F SIDEWALK OR DRIVEPAD.
- G METER. TOP OF METER TO BE 12"-18" BELOW COVER.
- H CORP STOP.
- J MAIN WATER LINE.
- K TAPPING SADDLE.
- L COPPER SERVICE LINE.
- M COPPER SETTER.
- N TAILPIECE TO PROPERTY LINE WITH INSTA-TITE I.P.T. CAPPED FITTING.
- Q CONCRETE PAD REQUIRED IN ALL AREAS.
- R #4 REBAR CONTINUOUS ALL AROUND METER BOX.
- S STABILIZER BAR. 12" LONG X 1/2" DIAMETER GALVANIZED STEEL PIPE.
- T METER BOX LID SHALL BE FLUSH WITH SURROUNDING SIDEWALK.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
26 64 56.89 2203

dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539



CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE:
**EL RANCHO GRANDE - UNIT 5B
WATER DETAILS**

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
C.O.A. STANDARD	C.O.A. STANDARD		

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
645689	M-98N-9	22	22

AS BUILT INFORMATION			
CONTRACTOR	NEW CONCEPTS	DATE	03/03
WORK STAGED BY	ALB	DATE	03/03
INSPECTED BY	MGP	DATE	03/03
FIELD NO.	ALB	DATE	03/03
DRAWN BY	ALB	DATE	03/03
CHECKED BY	ALB	DATE	03/03
RECORDED BY	MICRO-FILM INFORMATION	DATE	
NO.			

SURVEY INFORMATION

FIELD NOTES

ENGINEER'S SEAL

C.O.A. STANDARD

NO.	DATE	REVISIONS	BY
		DESIGN	
		DATE	09/02
		DATE	09/02
		DATE	09/02